COOKIA

Journal of the Wellington Shell Club, New Zealand

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WELLINGTON SHELL CLUB 70TH ANNIVERSARY

SCRATCHING THE SURFACE OF PAPAMOA BEACH

WELLINGTON STORM ENCOUNTER

AN UPDATE ON *Hygromia cinctella*

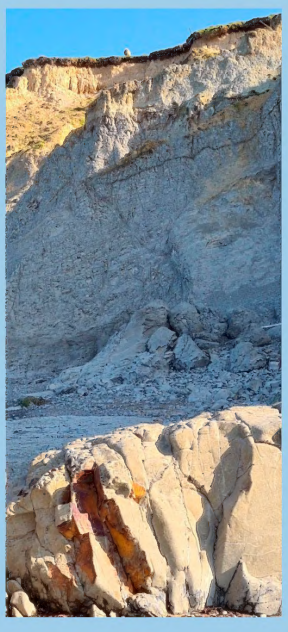
LIVING IN RUSSELL

RECENT SCAPHOPODA OF NEW ZEALAND

FROM LOCKDOWN TO PLATINUM ANNIVERSARY-
THE LAST FIVE YEARS

Can you spot what the odd shell is, that's hiding amongst these *Struthiolaria* shells?

Answer on page 9



Can you see the sheep on the top of the cliff watching the Wellington shell collectors down below? Where was this photo taken?

Answer on page 18

Who made these cute shell mice and what was the occasion? **Answer on page 2**

Can you guess the unusual, non-shell find among these stones exposed at low tide at Tapeka Point, Russell?

Answer on page 26

Photo taken by remotely operated vehicle on RV. Sonne, January 2025 of coral reef at 500 m off southern New Zealand. In the foreground are *Acesta maui* B.A. Marshall, 2001 and red *Dermechinus horridus* (Agassiz, 1879).
Photo acknowledgements: K. Walton, Te Papa Tongarewa & MURUM (Centre for Marine Environmental Sciences).

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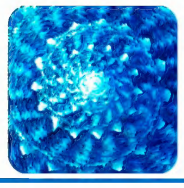

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Editorial

This edition of *Cookia* is a celebration of the Wellington Shell Club attaining 70 years of age, and on the following pages you can read about the celebrations and members' memories of the club. It is also notable that the club has managed to produce a magazine during most of its existence. In the absence of a dedicated editor, this edition is a combined effort by existing committee members. We are unsure if this can continue but are pleased to have been able to produce this, our 70th year edition. There has been no shortage of writers so that is a promising sign and while most of our members are marine collectors, there remains a dedicated group of land and freshwater enthusiasts in our club, and several articles in this edition have been written by them. Our aim in producing this magazine is to provide a quality forum to inform members of developments, discuss our varied shell interests, and engender discussion and increased interest in shells and the study of molluscs generally. I believe this edition achieves this. I hope you will enjoy it.

Jenny Raven

Acknowledgments: Thanks are due to the club members who have produced this edition of *Cookia,* namely Jenny Raven (editor), Roger Woods (co-editor; set up, layout and design), Jill Burnet (proof reading and content improvement) and Andrew Spurgeon (photographic improvements); thanks are also due to Museum of New Zealand *Te Papa Tongarewa* scientists, Kerry Walton and Bruce Marshall for scientific comment. We would welcome assistance from club members with any of this work for a future edition.

Disclaimer: The views, opinions, statements and text expressed in *Cookia* are those of the authors and may not necessarily be those of the Wellington Shell Club (WSC), its editors and publisher. The WSC assumes no liability for any content provided by our authors.

Cookia logo: New Zealand has a rich diversity of mollusca from the sea to the fresh waterways to the land and so the colours of water to land are expressed here. The shell image is in negative photographic form and intensified in colour to create a dramatisation of the beauty of this fauna of Aotearoa. **Logo credit**: Selwyn Bracegirdle

Outer covers logo: Cook's Turban Shell, *Cookia sulcata* (Lightfoot, 1786), from "An Encyclopaedia of New Zealand" *[sic]*, edited by A. H. McLintock, originally published in 1966. Te Ara - the Encyclopedia of New Zealand. https://teara.govt.nz/en/1966/27317/cooks-turban-shell-cookia-sulcata

Wellington Shell Club 70th Anniversary - A Tale of Two Events

Kris and Roger Woods

The Wellington Shell Club has an established history of observing its founding. The club was started by Dr R. K. Dell of the of the Dominion Museum, now the Museum of New Zealand Te Papa Tongarewa, (Te Papa). The first meeting was held in the museum's board room on 26 May 1955. With the date looming, the opportunity was offered to celebrate the 70th anniversary a little earlier with two special occasions held on 26 April 2025. Te Papa, through Kerry Walton, offered the club the use of the "Backyard Lounge" off the *Te Taiao* Nature Space to set up shell exhibits for the public on Saturday 26 April 2025. This coincided with an annual intercity species count, known as the "City Nature Challenge" held from 25 to 28 April. During the evening, following the closure of Te Papa to the public, the club hosted a social to celebrate its 70th anniversary.

With the scene set, the fun began. For some it started early at the Te Papa dockway with Pat Lakeman, Tony Tomlin, Jenny Raven, Kris and Roger Woods, Jill Burnet and Heather Smith being met by Kerry Walton to unload exhibits and club promotional material onto a large trolley which Kerry manoeuvred expertly through the back of house to the "Backyard Lounge". What a lifesaver that trolley was! As you can well imagine it was all on before the public would start coming in at ten o'clock. Couches and tables were put into position with the amazing assistance of Te Papa staff. A vote of thanks goes to these staff, in particular, Liz, Aroha and Charlotte who were invaluable throughout the day. A shell club promotional table was set up and a tray of giveaway shells for children was temptingly placed.

Kerry set up his tables for children to create shell mice. Meanwhile Pat, Kris and Jenny, with Heather and Jill's able assistance, set sail on their shell displays. The shell displays would reflect the species count theme of the "City Nature Challenge". Pat worked on her much-loved Haliotidae family. Kris set up her Muricidae, then her shells of the Kāpiti and Horowhenua beaches. Jenny set up three displays; one of worldwide colourful shells, one of shells collected about Wellington and one of New Zealand shells from different shell habitats.

Opening soon arrived and within a short space of time, the first public members arrived - a mother and her young daughter. They had specifically come to Te Papa so the little girl could make a shell mouse. In no time at all children were clamouring to create; it became a very popular activity. Kerry, parents, and the Te Papa staff who were assisting, were clearly having a fun time as well. It was delightful seeing the children's faces light up with excitement as their mice took shape. It was not just children making mice, there were keen adults as well, including Te Papa staff and at least one shell club member. The tray of giveaway shells was extremely popular with children. More often than not they spent a lot of time, sitting down with their families, admiring, then finally choosing their shells. There was a good deal of admiration from adults and there were enough for them to take as well. There was also a lot of interest in the shell displays from both adults and children. In the event's promotion, the public were asked to bring in shells for identification. This offer paid dividends. A ten-year-old boy had a bag of self-collected shells he had found on the Kāpiti beaches. He began to ask questions and wanted his shells identified. He and his dad were taken to the Kāpiti and Horowhenua shell display whereupon he accurately identified each shell. The same boy was seen reading the "Compendium of Seashells" forty minutes later; perhaps a future shell club member! Several other children wanted their shells identified. If they said they had collected them around Wellington then, as with the ten-year-old, a club member helped them with identification at the displays. Others, including adults, brought shells not to be identified rather, they simply wanted to show their precious finds. The constant flow of visitors engaged with shell club members, studied the displays and asked all manner of questions,

including a young adult who postulated theories about why certain shells grew the way they did. A couple of overseas tourists, who enjoyed collecting shells on their travels, asked in-depth questions about the collecting locations in and around Wellington. Having only six shell displays in the room meant that many people revisited the displays and of course this delighted the shell club members, who were very relaxed and encouraged by the public interaction. Nearing Te Papa closing time the displays were loaded onto the large trolley to be taken to the dock way for collection after the social function.

The venue for the evening social function to celebrate the club's 70th anniversary was in a room colloquially referred to as the "red couches room". Awaiting the gathering, on display, was the anniversary cake that Alison Rusbridge had beautifully crafted; its presentation exceeded all expectations. Finger food and liquid refreshments were available for the twenty-five club members, former members, guests and our two honorary members, Te Papa scientists Dr Bruce Marshall and Kerry Walton. Members had travelled from Whangarei in the north to Motueka in the south. This was a great opportunity for a relaxed catch-up and reminiscing for all. Photo displays depicting present and former club members and club activities evoked many memories. Those in attendance included former presidents, Pete Cresswell (1975 - 1976) and Pat Lakeman (2012 - 2015) as well as David Cowe, who joined the club in 1958. Monthly meetings normally feature a raffle and with this event in place of the April meeting, there was a raffle with special New Zealand shells for prizes.

President, Jenny thanked everyone for coming. Her presidential address to the gathering reflected upon, among other things, the club's past members, club activities and the contribution of committee and other club members to the club, and the day's events. She also referred to the club's long-standing association with Te Papa and acknowledged the club's founder Dr Dick Dell (later director of the Dominion Museum). Throughout her address, people made good-humoured comments as more memories were evoked and shared. Jenny also recognised the privilege it was for the club to hold the anniversary event in the main Te Papa building. At the conclusion of her address Kerry was thanked for his part in the day's events and Jenny drew attention to the surprising popularity of the shell mice activity. Kerry was invited to make a few remarks, during which he referred to the positive relationship between Te Papa and the club. He also mentioned the availability of Te Papa's new digital records and other information, concluding that it was an exciting time to have an interest in New Zealand molluscs.

With the formal part of the evening over, glasses were raised. The cake was then ceremoniously cut by Jenny, Pat, Pete and David with the latter pair spontaneously regaling everybody with a few humorous stories. Alison prepared slices of her cake for all to enjoy and more lively shell conversations continued until the evening concluded with the drawing of the raffle. All good things must come to an end. It was a memorable occasion and gratifying to know that everyone had thoroughly enjoyed themselves. This was a unique day for the shell club with the fun "Backyard Lounge" event and culminating with the evening social. The 70th anniversary was celebrated in great style and with much success.

In attendance were:
Jill Burnet, Claire Clark, Lyn Clark, David, Lisa and Victoria Cowe, Dee and Pete Cresswell, Arie Frans de Jong, Claire Elliot, Margaret Elliot, Judy Hardie, Christine Hope, Carolyn Krebs, Pat Lakeman, Dr. Bruce Marshall, Jenny Raven, Alison Rusbridge, Eric Scott, Heather Smith, Tony Tomlin, Kerry Walton, Indiana Willis, Kris and Roger Woods.

Wellington Shell Club 70th Anniversary– Other Comments

Heather Smith

With a small party of Wellington Shell Club members, I arrived at 8am at a back entrance loading bay of the Te Papa museum. The enormous roller door opened and we loaded trays of shells onto a large trolley and trundled along a sterile corridor until we came to an enormous lift. Surprisingly the doors opened like "Jonah's jaws" and swallowed us into the inner workings of Te Papa. Three floors up we set up shell displays for the public. For me a successful educational story unfolded as a nine-year-old boy picked up a *Conomurex luhuanus* (Linnaeus,

1758) shell from the free basket of shells. He thought it was a poisonous cone shell being shaped rather like a cone and asked me to identify it. We located the shell club's "Compendium of Seashells" and turned to the Strombidae family for him to identify his shell. I then turned to the Conidae family and showed him the poisonous "geographic cone" and others in this family. He was really interested in looking at the book. His father had left him to view the shell displays so I suggested when his father returned he might take a photo of the cover of the compendium and maybe find it on-line for purchasing. Sometime later when trying to explain to two lovely young German girls why the paua *Haliotis iris* Gmelin, 1791, had holes, I glanced up to see the boy's father photographing the cover of the compendium! The day was a great success and very rewarding to see visitors of all ages taking an interest in the shell displays.

Pat Lakeman (Past President) and Tony Tomlin
"Many thanks for all involved for your hard work to organise and present the joint Te Papa / Wellington Shell Club event at Te Papa on Saturday as part of the "City Nature Challenge", and the evening celebration of the club's 70th anniversary. It was a really excellent day and most enjoyable in every respect - a real team effort and a tremendous result".

Kerry Walton, Curator of Invertebrates, the Museum of New Zealand, Te Papa Tongarewa
"Thank you to all of you who helped the weekend shell events come together so successfully. I have heard only positive feedback. While I don't have figures for how many people came through the public event, I would estimate that we made about 150 shell mice, judging from how many shells were left over in the end. I hope the shell club gained some useful publicity, and possibly members, as a result. Congratulations on 70 years of supporting the shell community".

Jenny Raven (Wellington Shell Club President)
From a President's viewpoint, our 70th anniversary could not have gone better. When Te Papa curator, Kerry Walton suggested Te Papa as a venue for our anniversary I readily accepted; the venue would be perfect. We were a little puzzled when Te Papa said they would handle shell mice making, but with the club contributing six shell exhibits, a club information table and a basket of shell giveaways, this was the perfect recipe, and the day could not have gone better. We obtained no new members but to see the public's interaction with the shells was unlike anything I had experienced before. It's hard to forget those children's faces with little ones reaching out for a free shell, others serious and listening intently, when given the choice of which shell to choose for their mouse body and ears. The Te Papa staff were wonderfully accommodating and so happy to oversee the event – our wonderful day went quickly, and the evening function fell easily into place, with socialising, speeches, some anecdotes and a lovely cake to finish - a perfect celebration.

Public viewing displays in the Backyard Lounge

⇧ Kerry Walton making shell mice

⇧ L to R. Arie Frans de Jong, Dee Cresswell, Judy Hardie, Claire Elliot, Margaret Elliot, Claire Clark, Tony Tomlin, Pat Lakeman, Heather Smith, Christine Hope at the social gathering

⇧ L to R. Pat Lakeman (Immediate Past President) David Cowe (joined the club in 1958), Jenny Raven (Club President) and Pete Cresswell (Past President) cutting the anniversary cake

⇨ Happy club members heading home in the Te Papa freight lift

⇧ L to R. Carolyn Krebs, Pete Cresswell, Arie Frans de Jong, Dee Cresswell, Margaret Elliot, Judy Hardie, Claire Elliot at the social gathering

⇧ Address from Club President Jenny Raven

⇧ L to R. Kris Woods, Lyn Clark, Alison Rusbridge, Jill Burnet listening to Jenny's address

Some Early Recollections of the Wellington Shell Club

Various Contributors

Pete Cresswell (Past President and member since 1960s)

My association with the Wellington Shell Club began in the 1960's when I lived and worked in Wellington. In 1974, I rose to the dizzy height of President – a rather short-lived position being extinguished, almost within a matter of months, by a transfer to the South Island.

As I recall, the meetings at the Dominion Museum (now, Te Papa) were particularly well attended, having regard to the then relatively small membership. This was offset by the intense level of interest and enthusiasm – to a considerable extent generated by museum staff member Dr Frank Climo, and other professionals from various institutions conducting study groups relative to particular families represented in the New Zealand taxa. There was generally a short "lecture" which outlined the structure and members of a family in New Zealand; land snails were included. The lecture was augmented by trays of specimens from the museum's collections. To a young amateur of limited conchological knowledge this combination represented pure gold. Notes from the presenter were later published as club "study notes". After the formal part of the evening, members could mingle and get further information from each other and the museum member. Exchanges of specimens among attendees was later introduced and proved to be a source of both interest and additions to members' collections.

Dr Ian Payton (member since 1960s)

I am the long-standing club member whom most of you have never met and who very few of you would recognise if we passed each other in the street, and that is because I haven't lived in Wellington for the last 58 years. My love of shells comes from my mother (Nancy Payton) who taught me how to walk the drift line looking for what the last tide had brought in. My father was a Baptist minister, and the family moved parishes every few years. From 1961 to 1967 we resided in Wellington and as was her custom, mum joined the local shell club. In those days club meetings were held in the boardroom of what was then known as the Dominion Museum, that imposing building in Buckle Street behind the Carillon.

My memory of club meetings is of sitting around the boardroom table listening to Dr Dell, Mr Paul and others discussing the "group of the evening", illustrating their talks with specimens from both their private collections and the museum collection, and helping club members with their identification problems. I remember one evening asking Dr Dell about a *Powelliphanta* snail, and him replying "if you can tell me where it came from, I'll tell you what it is;" and for the most part he was right, because *Powelliphanta* do tend to have very localised distributions. He also held the view that New Zealand's large landsnail species were doomed and should be collected before they became extinct, and preserved in museum collections. How attitudes have changed.

But for me the importance of the Wellington Shell Club has been in the people I have met, either directly or indirectly. Dr Dell introduced me to John Marston and through him I met Bev Elliott, Pete Cresswell and others. John and Bev needed someone to accompany them on their shell collecting trips and I was happy to oblige, and Pete Cresswell took us to find *Powelliphanta spedeni* in northern Southland. John Marston became a lifelong friend. Between the mid-1960s and the mid -1970s we roamed the North and South Islands of New Zealand, looking for land snails and whatever marine and freshwater species crossed our path. He was a school teacher and I was a student, so our holiday periods coincided. Then the seemingly inevitable happened, I finished university, got married and got a job. We remained close friends and today I'm shifting my collection and his land snail collection into the Canterbury Museum.

Since Ian considers no-one would recognise him, we attach a photo. Ed

W. J. (Bill) Paul by Jill Burnet (member since 1979)

W. J. (Bill) Paul

One person stands out from my first shell club meeting. I had been looking forward to joining a shell club since I knew my family was moving to Wellington. My first contact was with John Marston, who was then the outgoing secretary. I had phoned him, and he told me very carefully when and where the next meeting was, with detailed instructions on getting there. Thanks to him I found the correct room in the Dominion Museum where there were about a dozen people gathered. I had hoped to slide in quietly and sit unnoticed at the back. No such luck – after the formal part of the meeting, a very tall man came over to me and asked me what my interest in shells was. I was quite overawed, didn't know what to say but managed to stammer out that I had been collecting seashells since I was a child. Luckily, I didn't let the scary start put me off and I kept going to meetings. The tall man, Bill Paul, was always there. At that time, he was the treasurer, *Cookia* editor, and, with John Marston's resignation, the acting secretary.

I soon found that there were regular identification spots at most meetings, and I began to take in a few shells each time. I'm sure that many of them were very common and beach worn, but Bill Paul would always give me the names and was never discouraging. As editor, he was constantly pleading for articles for *Cookia*. He told meetings that being editor did not imply he was also sole author. I'm afraid it was a few years before I felt up to contributing. However, when he asked for someone to help Betty Wolf by typing the newsletter, I offered. It turned out that he wanted gestetner stencils cut. Well, my typewriter had a stencil setting, but I wasn't keen on them, so I said I would prefer to type on paper and photocopy. That caused a bit of surprise. I think Bill was retired by then and didn't realise how much copying had progressed, but he agreed to my suggestion.

Bill had been a statistician working in the public service. According to Dick Dell, he was always able to find a reason to leave his office and turn up at the museum every week to talk shells and pester Dick to start a shell club. Bill had collected all sorts of natural objects as a boy, eventually concentrating on shells, then specialising in Australian shells – particularly those also found in New Zealand. He attended and addressed several conventions in Australia, and from time to time he gave talks to our shell club and hosted meetings at his home where he showed us his collection. He moved from Karori to Papakowhai after his retirement, where he studied the species found in Pauatahanui Inlet. He was also interested in early New Zealand conchologists and the books they had written and talked to the club about them. This caught my attention as I then had no shell books.

Bill did a lot for our club, quite apart from encouraging Dick to start it. He was the honorary secretary, doing all the administrative work up until 1967. When a committee was elected at the end of that year, he was made president, holding the position until 1974. He was our first life member, a well-deserved title. He took on the position of librarian in 1977, treasurer from 1978-79 and editor from 1979-82. In 1981 he was appointed an honorary museum associate of the mollusc department and also served as president of the "Friends of the Dominion Museum".

Jenny Raven (member since 1970)

I started collecting shells as a "Brownie" (junior Girl Guides) when we were taken to the local beach at Lyall Bay to pick up shells. I remember completing my nature badge in shells, when all the other girls pressed flowers. This was followed by a teacher giving me a foreign shell collection and from then on I continued to build up a basic collection. I joined the Wellington Shell Club as a teenager when my mother saw a shell display and advertisement for the club in the window of "Gordon's Sports Goods" store in Wellington in 1970. I tentatively attended my first meeting and well remember the austere surroundings and meeting room in the old Dominion Museum. The latin names were foreign to me but I was entranced by the shells and study notes given to us by the museum scientists. I continued attending meetings but my attention for shells dwindled due to other attractions in my 20s; this combined with two years of overseas travel led to my membership lapsing.

In 1978, I was back in Wellington working in a government department. It was there I met up with shell club member, Claire Clark who told me she was going on a shell club fossil hunting trip to Wanganui. I decided to go with her

and remember the trip well. I rejoined the shell club again and soon after fellow work mates, Pat Lakeman and Graham Aamodt joined the club on a field trip to Island Bay. Then another workmate, Eric Scott joined us and soon after that a fellow by the name of Peter Jamieson attended a meeting. We were all of a similar age. I'm not sure where Peter came from but his knowledge of shells was amazing. He knew where to find them, what shell was in every collector's collection, and he travelled, traded and corresponded widely on shells. His enthusiasm was infectious and he often passed shells my way. He also organized fieldtrips to locations he knew we would find shells. Very soon, groups of us were travelling on overnight trips to various locations throughout the country - to places like Kaikoura, Marfells Beach, Mahia and Northland. Many of these trips are reported on in the *Cookias* through the 1980s. My collection grew and it was a fun time.

By the early 1990s, Peter was concerned the club had too many elderly members – "if we didn't replace them" he said "the club would die and we had to hold a shell show to get new members." And so we formed a committee and started planning for our first show. This included running garage sales to raise the necessary funds. The Auckland club had held shell shows for its members for several years and at Peter's insistence I attended one. Peter decided what shells I should enter and even transported them to Auckland and set them up as I could not travel on the Friday. I turned up on the Saturday and was amazed to see I had won at least one prize and people were keen to talk to me about my shells. At least for the Wellington show I had some idea what to do. We decided the show would be held for the 40th anniversary of our club and we would call it the "1st National Shell Show" in the hope that Auckland, and other collectors around the country, would attend. We booked a room in the new Wellington Public Library building and arranged for our Patron, Dr Dick Dell to be guest speaker. Unfortunately, Peter had become ill in the months leading up to the show and passed away a few weeks prior. The show, in May 1995, was a spectacular success. A large number of Auckland and wider New Zealand shell collectors attended. Prizes were shared around and more importantly we gained some new members. Peter was right. We did lose a number of our valued, older members soon after, but the club survived, and the enthusiasm of many collectors for shells today, is largely due to him.

Jenny Raven with Peter Jamieson, early 1990s

Dr R.K. Dell presents Kevin Burch with a prize at the 1st National Shell Show in Wellington, 1995

Scratching the Surface of Papamoa Beach

Selwyn Bracegirdle

Since moving to Papamoa Beach three years ago, I have loved combing the local beach, which is four minutes' walk away, for shell washups. The following finds that I am sharing, only scratch the surface of finds I have made over three years, but they are worth highlighting.

At the top of the list are *Bullina lineata* (Gray, 1825) and *Bulla quoyii* Gray, 1843. On the evening of Sunday 5 January 2025, while searching Papamoa Beach, west of Harrison's Cut, I came across two American tourists with a local friend who were searching unsuccessfully for shark teeth. Later, when looking east of Harrison's Cut, I met the Americans again at low tide where they had found a *Bullina lineata.* Seeing my excitement, they gifted it to me. While looking unsuccessfully for more specimens, I was thrilled to discover a small *Bulla quoyii* amongst a lot of *Struthiolaria* shells. Both these specimens are now in the Museum of New Zealand Te Papa Tongarewa collection, as they have not been recorded as being collected on a Bay of Plenty beach.

Three months later, on 10 April 2025, I found a mature specimen of *B. quoyii* (29.8 mm) a few hundred metres west of the Papamoa Surf Lifesaving Club, washed up at high tide. While the original *Bullina* and *Bulla* specimens could have come from the stomach contents of a gutted fish, the presence of a second and more mature *Bulla* suggests the possibility of surviving spat in the area. It will be interesting to see if more local finds of these species occur in the future.

In addition, during 2024, I found some further firsts for me on Papamoa Beach. On 19 October 2024 I found my first fresh *Coluzea spiralis* (A. Adams, 1856) - not complete but with its protoconch intact. Earlier, in July 2024 I found an *Uttleya ahiparana* (Powell, 1927) 13.6 mm and my first *Nassarius aoteanus* Finlay, 1926, the latter was about 500 metres east of the Papamoa Surf Lifesaving Club. Then, on 16 October 2024, 500 metres west of Harrison's Cut, I found a second specimen, 28.7 mm. There is no shortage of interest for my local beach collecting.

The shells found on Papamoa Beach

***Bullina lineata* (Gray, 1825) and *Bulla quoyii* Gray, 1843**

***Uttleya ahiparana* (Powell, 1927)**

The two *Nassarius aoteanus* Finlay, 1926

Tateid Snail from the Pupu Hydro Water Race

Saskia Wood and Arie Frans de Jong

The Pupu Hydro water race begins at the end of Pupu Valley Road about 6 km due west of Takaka, in the Golden Bay area. The track generally runs through mixed forest of beech, rimu, podocarp, silver pine and native grasses. It crosses the Te Waikoropupu River and goes uphill to the Campbell Creek water race. The geology of this area is complex. The eastern part of the walkway consists of Separation Point granites; igneous rocks formed during the Cretaceous era. At the western end of the water race, the intake dam straddles Campbell Creek. Here the rock changes with a fragment of the Golden Bay faultline coming through this area. There are altered minerals like schist, quartz, fuchsite etc. and hardly any snails were observed, except *Powelliphanta* snails which we encountered near the pipe intake of the water race into the power station.

We took some samples of washed-out debris from seeps along the track: none held any snails, not even a fragment. A lot of the seeps flow into the water race, that has a strong current. So, if there were any snails they would most likely end up in the water race, never to be seen again. However, in the sample we took from the seep out of the first deep culvert, uphill from the small road leaving the dam, coordinates: 40.85321° S, 172.72147° E, we found some fragments and one complete shell of a tateid. In this area there are small dark ravines where water runs through old cast iron culverts. The overall bush at the site looks non-indigenous with regrowth likely, since the gold mining era. Closer examination shows this one specimen recovered from the Pupu Hydro water race track is clearly a crenobiont tateid; it closely resembles *Catapyrgus jami* Verhaegen & Haase, 2021. This species is described from the Kaituna Track, S.W. of Collingwood, coordinates: 40.71008° S, 172.56008° E. Pete Cresswell kindly provided a number of shells collected at the type locality in 2021.

The shell morphology of the Pupu Hydro specimen comes very close to the topotypes (see illustrations), with only the width of the aperture somewhat larger in the Pupu Hydro specimen. It is impossible to say if this is a species discriminating feature, or just a variation within the species. The shell measures 1.6 mm which is within the range of the type material. Up until now, the species is established with certainty only from the type locality. Specimens found in January 2024 in Rameka Creek (De Jong & Cresswell, 2024) await confirmation from molecular analysis. It should be clear that based on a single, empty shell, without anatomical information like the shape of the operculum and an analysis of the DNA structure, no valid identification is possible. However, the Pupu Hydro specimen suggests *C. jami* or a closely related species has a broader distribution in the Golden Bay region. Until more material is examined and living specimens are available, I will treat the Pupu Hydro find as another *Catapyrgus cf. jami.*

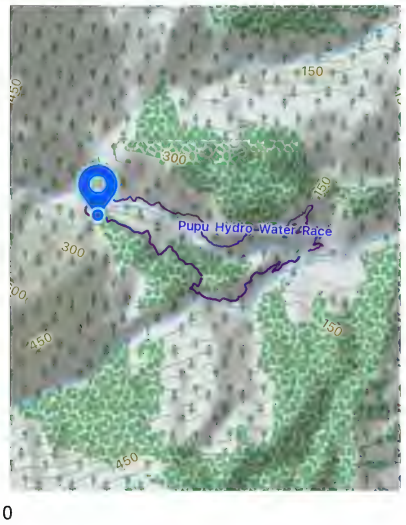
References:

De Jong, A.F. & Cresswell, P.L. 2024. Tateidae on the Rameka Creek track, Golden Bay – something new or range extensions. *Cookia* 36: 15-16.

Verhaegen, G. & Haase, M. 2021. All-inclusive descriptions of new freshwater snail taxa of the hyperdiverse family Tateidae (Gastropoda, Caenogastropoda) from the South Island of New Zealand. *European Journal of Taxonomy* 731: 71-96.

⇦ ***Catapyrgus cf. jami* from Pupu Hydro Water Race**

⇨ ***Catapyrgus jami* from type locality**



The authors wish to acknowledge Mr Francois J.A. Slieker, the Netherlands, for his professional attention to the photos.

⇦ **Locality Map**
Source Garmin GPS

Wellington Storm Encounter

Kris Woods

On 1 May 2025, a severe southerly storm battered Wellington with heavy rain, strong winds and large waves. The Eastbourne side of Wellington Harbour suffered considerable swells causing road closures and the Petone esplanade was littered with storm debris. When things calmed down, a few days later I ventured over to Eastbourne's Rona Bay and to Petone Beach, to discover the storm with its fierce winds and large waves had left behind in its wake, a more than significant amount of seaweed, driftwood, bark matter and, as I had hoped for, large washups of seashells.

On Petone Beach, an abundance of empty *Zenatia acinaces* (Quoy & Gaimard, 1835) were washed up. Most were 75 mm to 90 mm. This is something I have not encountered there before. Another first was the presence of numerous, empty *Solemya parkinsonii* E.A. Smith, 1874 around 45 mm to 62 mm. I was surprised, considering their fragility, that many were still largely intact. On returning to Petone Beach a week later both these shell species were still present in good numbers but this time it wasn't shells that caught my immediate attention; it was the large wash-up of *Echinocardium cordatum* Pennant, 1777 (commonly known as the heart urchin). All the urchins I looked at were empty. Some still had their characteristic fawnish / yellowish spines but most were spineless and had a whitish appearance.

Eastbourne's Rona Bay beach is where I have found *Panopea zelandica* Quoy & Gaimard, 1835 in the past and I was pleased to find several empty examples of this species in the large washup. What I didn't expect to find though and was amazed by, were two dead ones, with their animals attached and siphons extended. Yet another first encounter for me!

***Zenatia acinaces* (Quoy & Gaimard, 1835) Petone Beach**

***Solemya parkinsonii* E.A. Smith, 1874 Petone Beach**

***Echinocardium cordatum* Pennant, 1777 Petone Beach**

***Panopea zelandica* Quoy & Gaimard, 1835 Rona Bay Beach**

Native snail likes foreign food

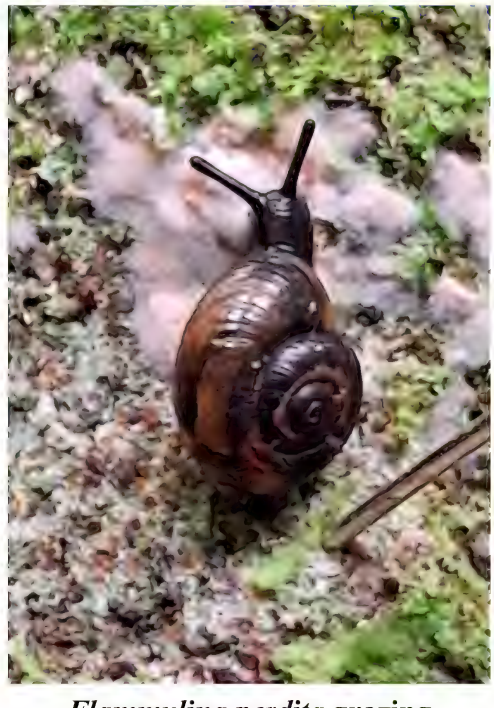
Saskia Wood and Arie Frans de Jong

We live in Golden Bay, close to the shore. Our garden contains patches of Miocene limestone rock and a regrowth of native shrubs and trees. With active pest control we try to keep the garden free from predators like mice, rats, hedgehogs, possums and stoats. This has a positive effect on the population of native snails that are gradually returning in the regrowth (Cookia 36, p.23). One of the species that we regularly see on Māhoe (*Melicytus ramiflorus*) and Māpou (*Myrsine australis*) is *Flammulina perdita* (Hutton, 1883). Especially after rain they actively cruise up and down the tree trunks. We observed them up to two metres high in the trees; they do not occur in the canopy. We were wondering why these tiny snails (shell is about 5 mm) would undertake such an energy consuming operation as climbing the tree trunks; was it for food? Charopid snails are often found in leaf litter, under rocks and the underside of logs. Being herbivorous they feed on decaying leaves, fungi and biofilm (microscopic algae), so why not stay on the ground, instead of climbing trees and risking being seen by predators?

The *Flammulina* seemed interested in a pink/grey crust forming fungus on the tree trunks and after a few days of observing their behaviour, it became clear they graze on this fungus. We contacted Dr Jerry Cooper, mycologist of Landcare Research New Zealand and asked him to identify the fungus, which he kindly did. It turned out to be *Peniophora incarnata* P. Karst, 1889. The common name is "rosy crust" fungus. This species has a global distribution. The "Biota of New Zealand" website comments that based on the GenBank ITS (database for storing genetic sequence data) accessions, there are two separate clades labelled as *P. incarnata,* one Asian (China, Korea, Japan), the other Western European. New Zealand specimens match the European clade. Dr Cooper remarked that it is very common to find radula marks on crust fungi like *P. incarnata*. It is an interesting question why endemic New Zealand snails graze on an alien fungus. Probably their diet already contained native crust fungi and possibly the step to "foreign food" was a small one. The authors wish to acknowledge Dr Jerry Cooper at Landcare Research New Zealand for identifying *P. incarnata*.

References: Biota of New Zealand. https://biotanz.landcareresearch.co.nz/

Māhoe trunk covered with fungus



***Flammulina perdita* grazing**

An update on *Hygromia cinctella* (the "girdled snail")

Peter Poortman

In 2016, Kerry Walton published a paper on his discovery of a new introduced land snail in New Zealand - *Hygromia cinctella* (Draparnaud 1801). In April 2025 I was surprised to find that species thriving in my small, isolated herb garden in Green Bay, Auckland, occasionally on parsley plants, but mainly in a thick patch of chives. Kerry confirmed their identity and said "*Hygromia* is now widespread in the North Island, mostly around urban centres. It spreads via soil (e.g. pot plants) and building supplies, either as aestivating snails or eggs. I suspect it had been in Auckland for a few years before I detected it in Wellington in 2015." My colony appeared a few weeks after spreading left-over potting mix in the garden, so I suspect that they arrived in those bags of "Number 8 Potting Mix".

Hygromia cinctella is commonly described as a crop pest, but Kerry stated "It seems fairly benign in the parts of Western Europe where it has been present (adventive) since the 1950s".

That is my impression of them too. Despite their relatively high numbers, I cannot see any evidence that they are actually eating the chives or parsley. What I do observe though, is that they appear to be clearing the chives of a black aphid infestation. So I, for one, am happy to have them in my garden.

References:

Walton, K. 2017. *Hygromia cinctella* (Draparnaud, 1801) Mollusca: Gastropoda: Hygromiidae: a new adventive land snail for New Zealand. *NZ Journal of Zoology* 44 (1): 9-13. DOI: 10.1080/03014223.2016.1210653

***Hygromia cinctella*. 7.5 mm. Pendlebury St, Green Bay, Auckland. May 2025**

An "If Only" Shell

Kris Woods

It's always a pleasure finding a *Modelia granosa* (Martyn, 1784). Over the years I have found a few small empty and very worn specimens at the western end of Lyall Bay on the Wellington south coast. With each find I hope the next one will be the grand prize. As I walked along this beach in April 2025, something bright pink lying on the sand caught my attention. Thinking it was something inorganic, I gave it a cursory glance but the inquisitive shell collector in me had me taking a closer look. I had found a prize *Modelia granosa* at long last! Whipping it up I turned it over and had an "oh shame" moment. If only it did not have a hole in it. Surely all shell collectors have these moments. Otherwise, it was a large and beautifully coloured specimen.

The *Modelia granosa* 74 mm found at Lyall Bay, Wellington

Poking around Purgatory (and other such places)

Kevin Mead and Pete Cresswell

In our quest for new localities harbouring tateid snails in the Nelson/Buller region, the Lower Buller Gorge has long been an attraction. Two species are discussed in this article, one being *Opacuincola mete* Haase, 2008 from a single location, which Haase described as "*Trickle beside small waterfall between Batty Creek and Tiroroa on south side of State Highway 6 in Lower Buller Gorge …*" It was then the only known locality for this species. At the same time Haase named and listed a second species in the Buller: *Opacuincola permutata* Haase, 2008, the type locality of which was Kennedy's Sink, west of Inangahua. Two caves, also in the Buller, were listed as having this species: namely Eggers and Profanity.

For some years several Wellington Shell Club members from the Nelson area have searched unsuccessfully for these caves and it was not until the last day of 2024 that success came our way, with the finding of Curiosity, Calamity, Purgatory and Profanity karst caves, all fairly close together on the south side of the highway. Being close to the highway was deceptive as there exists a screen of quite dense blackberry and gorse on both sides of a small stream, with the term 'small' being applicable only in sustained dry conditions. Another deceptive feature of two of the caves was the roaring of water heard from immediately outside. Being unfamiliar with them, this was very off-putting and certainly discouraged any inherent curiosity to enter.

Modest quantities of sand and fine gravels discharged from Curiosity, Profanity and Purgatory yielded a few reasonable specimens of *O. permutata.* The finding of specimens of what we now regard as *O. cf. mete,* was almost by chance. Below these cave entrances runs a stream draining the caves and the surrounding land, discharging to the opposite side of the road by way of a dual tunnel, installed when the road was constructed as a main highway. As an aside, this tunnel, when not carrying much water does present a short-cut to the caves. A small random sample of moss was collected within the stream. Surprisingly, this yielded a modest number of *Opacuincola* - like snails. These were certainly not *O. permutata* but following widespread determinations by us and other club members, were concluded to be *O. cf. mete*. Having said that, we await the outcome of DNA sequencing.

Finding this species was not altogether surprising, with its type locality being further up the Lower Buller Gorge. Nevertheless, this new finding is of significance – being both a range extension and new habitat. The latter has gone from a small trickle emerging from fissures in the rock beside a small waterfall (which was all but dried up in a subsequent search in the summer of 2025), to an extensive area of moss within a stream paralleling the highway, some 10 km distant. The trickle referred to by Haase is basically a seepage. Much sampling in promising habitats between these localities failed to yield anything other than the ubiquitous *Potamopyrgus antipodarum* (Gray, 1843).

References:

Hasse, M. 2008. The radiation of hydrobiid gastropods in New Zealand: a revision including the description of new species based on morphological and mtDNA sequence information. *Systematics and Biodiversity* 6 (1): 99-159. DOI: 10.1017/S1477200007002630.

Map of Lower Buller Gorge – the red square shows the location of a series of caves at 41.851726'S; 171.925778'E. Nearest town: Inangahua 2.4 km. Map source: LINZ NZ Topo 50 series.

⇧ **Extracting sand from a depression in the rock - Profanity Cave entrance in the background**

⇧ **Kevin Mead at the entrance to Purgatory Cave**

⇦ ***Opacuincola permutata* – holotype from Kennedy's Sink, Buller Gorge.**

© Museum of New Zealand Te Papa Tongarewa

⇦ ***Opacuincola permutata* - Curiosity Cave, Buller Gorge. Height 2.3 mm. In coll. PLC.**

Photo courtesy of Frans Slieker, the Netherlands

⇧ ***Opacuincola mete* – holotype from Lower Buller Gorge.** © Museum of New Zealand Te Papa Tongarewa

⇦ ***Opacuincola cf. mete* From moss in stream below caves. Height 1.9 mm. In coll. PLC.**

Photo courtesy of Frans Slieker, the Netherlands

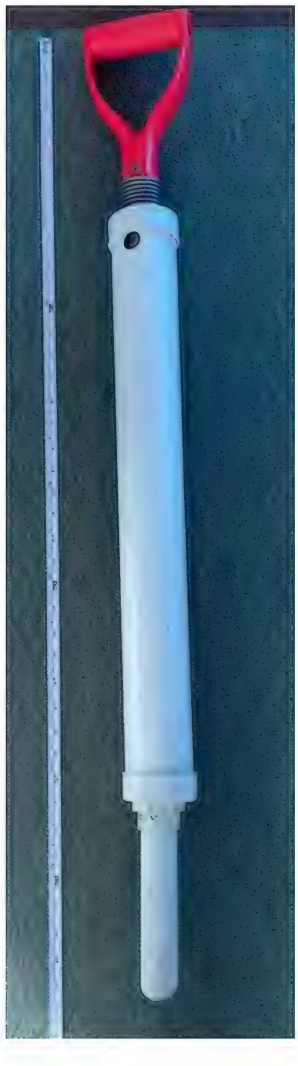
Extracting Small Snails (and other things) from Sand or Fine Gravels in Streams

Pete Cresswell

Collecting small snails from caves, streams and seepages has long been an interest of mine – with some success. I have, for some time, tried to get a "Bou-Rouch" pump which I saw on the "Research Gate" website, as being specifically designed to extract invertebrates from gravels. It is widely used in streams and other surface waterways as well as underground, in cave streams and pools. Knowing about this pump is one thing. Getting one, is completely different – with all efforts to date being unsuccessful.

In Motueka, I chanced upon a local entrepreneur with an interest in getting fine gold flakes from stream gravels by way of a pump he had designed and built. Essentially it consists of a 600 mm length of 62 mm external diameter PVC piping, capped at both ends by PVC caps, each of which has a centre hole of 38 mm diameter. Inside, there is an internal plunger 535 mm long to which a tennis ball is fixed at one end by way of a screw bolt and washer. The bolt passes through the centre of the ball to plastic "filler" welded into the interior of one end of the pipe. Immediately above this union there is a cushioning piece of plastic of a "spring" configuration. Protruding 190 mm from the business end of the pump's outer barrel, is the nozzle which can be inserted into anything from which sand / fine gravel is to be extracted. This is fixed to the barrel by way of an external, cold-welded (or glued) sleeve. At the "handle" end of the plunger, a similar plastic spring is fitted immediately below the handle – which is fastened by two self-tapping screws into the plunger. Below the cap, two opposing 20 mm holes are in the outer casing – thus allowing air to be inhaled and exhaled from the pump – creating the suction and ejection of air, plus water, including sand / fine fraction from the barrel.

This invention is a far cry from the "Bou-Rouch" pump but still has many advantages. I purchased one for around NZ$100. It is lightweight, robust, simply constructed and very portable. Getting gold flakes is an outcome yet to be realised – getting undamaged shells of very small molluscs has yielded encouraging results. The most productive outcomes have been when stream flows are at a minimum. Access to parts that never dry out improves the chance of success. When sampling a locality, it is best to work the pump a couple of times in water. With the barrel full, water can be quickly expelled with the nozzle lightly in the sand. This will create a significant depression and if the action is repeated a few times, the barrel will quickly work its way to around 300 mm below the surface, when a suction movement will bring significant sand / small fraction into the barrel – which can be discharged into a container. It takes only a matter of minutes to half-fill a nine-litre bucket. Screening the water / sand mix can be done at a later time to suit. Of course, you'll only get snails (and other animals) from sediments where they live or are present!



References:

Research Gate. https://www.researchgate.net/figure/Description of the Bou-Rouch pumping method for sampling invertebrates/

Exterior of the locally designed and built pump.

Photo courtesy of B. van Tiggele.

Working the Waimea River above the Appleby Bridge, Nelson

Getting good material from the Te Waikoropupu River in the Pupu Valley, Nelson

A selection of tateid snails obtained from sand and gravels, using the pump 30 m below carpark, at the Riwaka Resurgence walkway, Nelson

We Three Go to Mahia

Margaret Elliot

The following is a record of my first visit to Mahia with shell club members Lyn Clark and Jenny Raven, in September 2024. After leaving Napier we slowly made our way up a long, winding road flanked by mudstone cliffs, waiting at red lights or tailing a service ute with "follow me" on the back. The road works to repair the damage from Cyclone Gabrielle were still ongoing. Finally, we reached Mahanga Beach and our accommodation in the dark, happy to arrive and looking forward to seeing what the beach had to offer the next morning.

It did not disappoint; a sandy, flat beach with rocks and a stream at the north end where there was a lot of shell material washed up including vast quantities of wheel shells, *Zethalia zelandica* (Hombron & Jacquinot, 1848). My most notable find was a *Maurea tigris* (Gmelin, 1791) medium size and no holes, but nothing that I didn't already have. However, I had fun fossicking through the wash up finding lots of volutes, a small spiny murex and a hairy triton, as well as other favourites.

In the afternoon we went to Opoutama Beach, another wide expanse of sandy beach facing southeast with rocks at one end. Traces of the past included a sea wall made of rusty railway trucks filled with concrete and a ramshackle construction of multi-coloured corrugated iron panels. As we travelled around the district we kept encountering railway crossings with signs warning of trains that no longer came. We didn't find anything exciting at the rocky end so focussed upon the sandy beach looking for *Semicassis labiata* (Perry, 1811). Lyn found some good specimens. There was a lot of small, woody debris washed up that can contain shells but despite sifting through these I found only a worn specimen of *Semicassis*; more exciting was a complete specimen of the razor mussel, *Solemya parkinsonii* E.A. Smith, 1874.

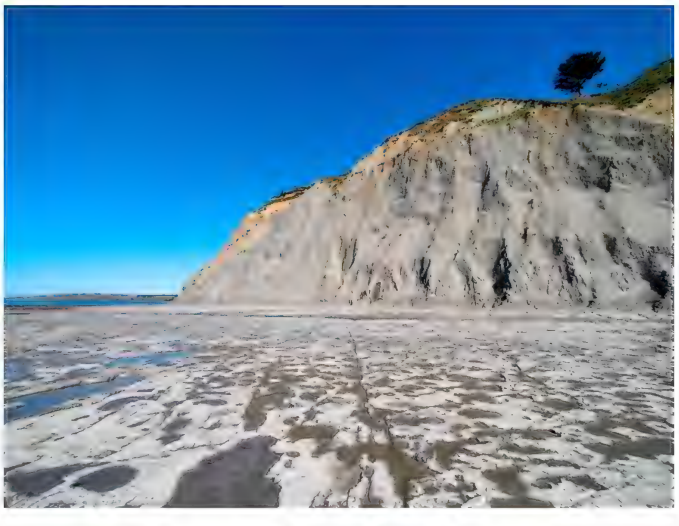
Our next destination was Taylor's Bay, which looked swept clean so we moved on to Mahia Beach, full of woody debris and washed-up seaweed. As I walked along the shoreline the debris thinned out, with the receding tide flowing through them, creating patterns reminiscent of braided rivers seen from the air. The dark strands contrasting with the light reflecting off the wet sand, combined with a backdrop of the white cliffs and sunset, made for photographic possibilities. I didn't have much luck on the shell collecting front but Jenny and Lyn found

some *Penion sulcatus* (Lamarck, 1816) and they gave me a couple of spares which was much appreciated.

Saturday was bright and sunny, and we headed off to Auroa Point on the north facing side of the peninsula in search of the bean cowrie, *Ellatrivia merces* (Iredale, 1924), and the mitre shell, *Isara carbonaria* (Swainson, 1822), as well as anything else the sea had to offer. This coast has tidal platforms of layered rock sculpted by earth movements, water and weather, into intriguing flow patterns. The pale grey rock contrasted with the blue sea, so photography started to take over from shell collecting. However, I did find examples of the target species as well as a couple of nice specimens of *Ranella australasia* (G. Perry, 1811). The rest of the day was spent at Oraka Beach, a tidal platform flanked by mudstone cliffs. I was intrigued by the golden limpets *Cellana flava* (Hutton, 1873), clinging to the mudstone rocks. Jenny photographed a sheep peering down at us from the cliff top.

On Sunday morning we returned to Auroa Point to explore in the other direction and more *Ellatrivia* and *Isara* were found. In the afternoon we went to the end of the coast road past Auroa Point and walked towards Table Cape, comprising several sandy beaches with tidal rock platforms. No significant shell finds occurred but we were watched by a curious seal, and on our return the tide had receded further to reveal seagrass meadows and rock pools. Two of the local children showed us a small octopus hiding under a rock in a rock pool; every so often it squirted out a jet of water sending ripples over the surface. The rock formations on the tidal platforms were intriguing and enhanced by the light so I took more photographs. On the way back to our base we popped into Opoutama Beach again and as we returned to the car, a southerly front started to roll in - a good time to head back and prepare for home.

⇧ **Flow Patterns, Mahia Beach**



⇧ **Tidal Platforms, Oraka Beach**

⇦ **Golden limpets, Oraka Beach**

⇧ **A local girl shows us the octopus**

⇧ **Opoutama Beach with the southerly front rolling in**

Obtaining Up to Date Information on New Zealand Shells

Jenny Raven

Most shell collectors like to put a name to a shell and there are many books and online resources to help with this. However most resources do not contain a complete listing or pictures of all named shells and if you get to the stage where you wish to study a shell family in detail, the following may help. Essentially you need an up-to-date checklist of currently named shells and then be able to source descriptions and pictures of them. It also helps to know the number of species that exist, but have not yet been named, as there can be a high percentage of these, some of which you may well have.

The World Register of Marine Species and MolluscaBase (WoRMs /MB) websites are linked and contain up to date names of all New Zealand named marine, land, freshwater, and fossil shells. Because this is a world-wide database, it does not indicate which are New Zealand only. The most up to date, published checklist for New Zealand named, marine molluscs, is in chapter 14 on mollusca in the "NIWA Biodiversity Memoir 136" published in 2023. It also provides the numbers of species in each family that are unnamed at that date, along with a reference to a museum voucher specimen. Spencer et al. (2009) is an earlier checklist that also covered New Zealand freshwater, land and fossil molluscs. Also recommended, is Andrew Spurgeon's website, "New Zealand Mollusca". This is generally up to date and contains a searchable, printable, checklist with distribution maps and many pictures, including holotypes from the Auckland and Te Papa museums.

In addition, Powell (1979) and Raven and Bracegirdle (2020) provide descriptions and coloured pictures respectively, of many New Zealand shells but if you are missing descriptions or pictures of some species, you may wish to look for these in the original publication that named that shell. This can be found by typing in the genus and species name on the WoRMs/MB websites and on the species page, the "Original Description" will cite the publication it was first named in. For those available in the Biodiversity Heritage library (as is the case with many New Zealand publications) it will give the page number in the publication and a link that takes you to the publication, the pages of which can be downloaded to your computer. Other publications cited on WoRMs/MB may be found on the internet; this includes the "Transactions of the Royal Society of New Zealand" which are freely available to download. Having printed a complete checklist for a family and checked the descriptions and localities of the species you don't have, you may be surprised to discover there are some you were not previously aware of, that you should reasonably be able to find.

Flicking between websites and texts to read descriptions and view pictures to identify an elusive shell, is not easy. It is easier if you have the checklist and pictures of the family you are studying in a computer file that you can print for easy comparison between the species. To achieve this for personal use, a mobile camera can quickly take photos in books, and others can be downloaded from the above websites. Then, there are various computer programs to print your pictures. One good program is called "FastStone Image Viewer". This is free to download from the internet along with a tutorial on its use. The contact sheets section of the program allows you to decide the layout, colour and number of pictures to print per page; it also inserts the file name and any information you wish to add under each photo along with a heading. The finished sheets can then be printed and saved. You are unlikely to ever be 100% up to date with your collecting, but these resources will enable you to get close.

References:

FastStone Image Viewer. https://www.faststone.org/

Marshall, B.A., Bolstad, K.S.R. & Enderby, A. 2023. Checklist of extant Mollusca known from the New Zealand EEZ. Pp. 221-237 in Kelly, M., Terezow, M., Sim-Smith, C. & Nelson, W. (Eds) The marine biota of Aotearoa New Zealand. Updating our marine biodiversity. Chapter 14. *NIWA Biodiversity Memoir* 136.

MolluscaBase. https//www.molluscabase.org/

New Zealand Mollusca. https://www.mollusca.co.nz/

Powell, A.W.B. 1979. New Zealand Mollusca. Marine, Land and Freshwater Shells. *Collins.* 500pp.

Raven, J. & Bracegirdle, S. 2020. New Zealand Seashells. https://sites.google.com/site/wellingtonshellclub

Spencer, H.G., Marshall, B. A. & Maxwell, P.A. et al. 2009. Phylum Mollusca. NZ Inventory of Biodiversity. Vol.1. Kingdom Animalia. *Canterbury University Pres.* 566pp.

Walton, K., Marshall, B. A. & Spencer, H.G. 2023. The Marine Biota of Aotearoa New Zealand, Kingdom Animalia, phylum Mollusca. *NIWA Biodiversity Memoir 136, Chapter 14*. https://niwa.co.nz/biodiversity-memoirs/

World Register of Marine Species. https://www.marinespecies.org/

Seeing shells … closer to home

Pat Lakeman

In the last few years I have written about shells spotted in my travels and some of the interesting stories behind them. Not being an active collector now, and with no major travels under my belt since I last wrote, this year is a bit of a challenge! But we went for a short Northland holiday in March/April 2025 and sure enough we bumped into some see-worthy items, in some of my favourite places.

Not a shell, but a very large, taxidermized crayfish, the red rock lobster *Jasus edwardsii,* was brought to our January 2025 club meeting by club member Hao Cheng. I was reminded of this when in the museum at Russell, Bay of Islands, where another huge example was on display, having been caught by a local commercial fisherman in 1973.

Size does matter, as they say about a lot of things, and why else is there a "Register of Largest New Zealand Shells" maintained by the Auckland Shell Club? I have had just a few entries on this list over the years, but one of New Zealand's largest gastropods is the wonderful ball-like *Tonna tankervillii* (Hanley, 1860). Nothing in my collection has ever approached the record size specimen of this species held by the Museum of New Zealand, Te Papa Tongarewa – 252 mm, from Urquhart's Bay, Whangarei Harbour in 2006 – and yes, that really is bigger than a soccer ball. But if you are in the right sort of place, you have to keep your eyes peeled. The beautiful Bland Bay is one such place, and I have found *Tonna* shells here in the past. This time, although I did find a piece of broken *Tonna* shell, it was one of those days when the beach was bare of almost everything. In contrast, I remember the late Bob and Betty Grange telling stories of walking ankle-deep in *Tonna* shells along Great Exhibition Bay, after a huge storm, albeit with most of the shells broken.

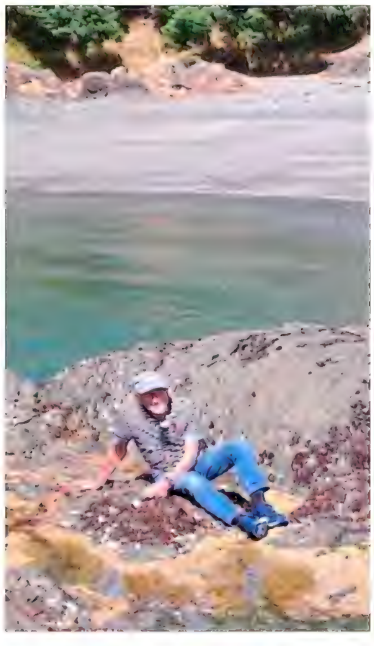
We made another sighting of very large shells at Clendon House, Rawene. These were two old and weather-beaten specimens of *Cassis cornuta* (Linnaeus, 1758) – the horned helmet shell. This species has not been recorded from New Zealand, and on asking one of the house guides, she thought the family would have collected or been gifted shells among their myriad of other activities, back in the late 1800s. Now operated by "Heritage New Zealand", Clendon House was built for James Clendon in the 1860s. British-born Clendon was a prominent merchant and landowner, a government official and US consul, a bilingual speaker and a signatory to "The Treaty of Waitangi". His much younger second wife Jane, was of Hokianga Māori and Irish descent, and her local connections took them to Rawene after he was prominent in the development of the Bay of Islands. The architecture of Clendon House reflected the family's standing in the community, but it is Jane's story that it mostly tells. When Clendon died in 1872 he left Jane with eight children under seventeen. Add to that, the fact that while the house was insured for a few hundred pounds, Clendon was thousands of pounds in debt. A wonderful quote from the visitor programme (Tohu Whenua): "(Jane was determined) to pay the debts and educate her children, all whilst remaining in their family home. She paid some debts with small amounts of land and cash. She wrote persuasive letters to her creditors. She traded in (kauri) gum, bark, firewood and garden produce – anything that would enable her to stay in her house. Amazingly, she managed to clear the debt and lived in the house until she died in 1919 at the age of 81." When purchased by the New Zealand Historic Places Trust in 1972, Clendon House retained a large proportion of its original furnishings and contents, which are still evident. Sorry, we are off the track from shells here – but what tales those *Cassis cornuta* could tell!

Another favourite spot in the far north for me, has for a long time been Taupiri Bay – 'little Taupiri' beach, to be more exact, where I have had several happy holidays and shorter visits. I have regularly found *Ellatrivia merces* (Iredale, 1924) and *Pictobalcis articulata* (G. B. Sowerby I, 1834) at this beach. Neither of these species are endemic, but both are satisfying finds. Alas, this visit to Taupiri was a very short one, on the same day as we went to Bland Bay, and shells were very thin on the ground. Tony was unsure why I would be looking so assiduously in such an apparently unrewarding spot but contented himself with eating some oysters from the rocks.

Despite our club newsletter regularly telling me the best low tides in the Wellington region, local collecting for me is rare. But for other reasons, we were on the coast at Orui Station near Riversdale in the Wairarapa, early in June. This was a two jackets, two pairs of socks, gloves and scarf etc. day – cold but fine, and enjoyable because we were well wrapped up. On a dropping tide some of the

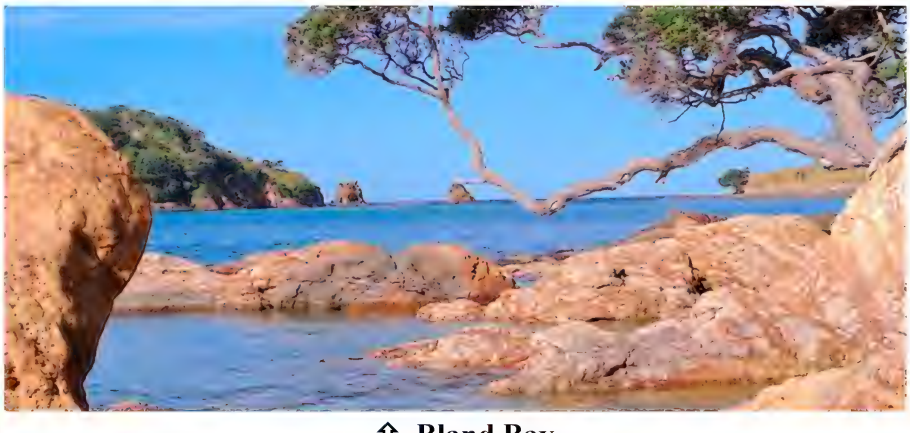
papa rock outcrops were exposed, and I was pleased to see a few small live examples of *Cellana flava* (F.W. Hutton, 1873). I had last seen this species on the Wairarapa coast a bit further south, at Uruti Point, in 2008. This is our endemic and very attractive "golden limpet" which has a distribution along New Zealand's east coast, from eastern Bay of Plenty to Otago. On the New Zealand "Threat Classification System" it is rated "at risk (declining)". It inhabits papa rock/ mudstone, rather than other types of rock (the terms papa or papa-rock are uniquely New Zealand terms for our widespread soft, blue -grey mudstone or muddy sandstone (Te Ara) which may explain why Don Watson (1999), did not report it in nearly 14 years of collecting in the vicinity of Te Awaiti, further south. *Cellana flava* grows to 60 mm x 50 mm or more, but the live specimens I have seen at Uruti Point and Orui Station have mostly been small (about 20 mm) and well dug in to the soft mudstone. At these locations I have seen this species bearing a small, dark radial stripe. That observation is not conclusive of anything, of course. *(They are not uncommon with a stripe at Mahia, as shown in the photo on page 18 – Ed.).* I have some beautiful, large examples of this species from Kaikoura and Cape Campbell, but the larger examples are often paler in colour. At Uruti Point I found several small, beached examples whose internal colour was bright orange, and they seemed like shiny, copper coins in the surf.

References:
NZ Threat Classification System. https://nztcs.org.nz/nztcs-species/26989
Te Ara, the Encyclopedia of New Zealand. https://teara.govt.nz/en/rock-and-mineral-names/page-1
Watson, D. 1999. Collecting shells on the Wairarapa coast from the north side of Te Awaiti Bay to Sandy Bay 1985-1999. *Cookia* 10: 11-15



⇨ **Tony snacking at Little Taupiri Bay**

⇧ **The Russell Museum crayfish**



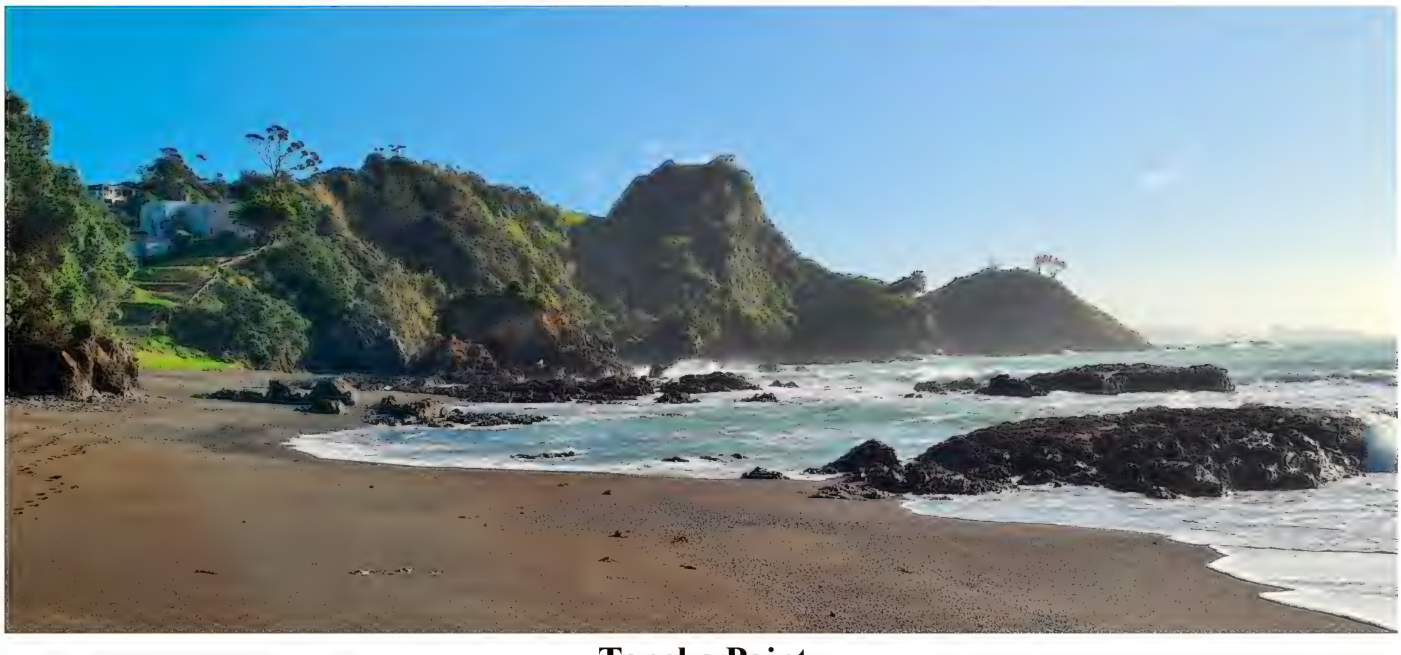
⇧ **Bland Bay**

⇧ **One of the old *Cassis cornuta* at Clendon House**

Living in Russell

Jenny Raven

From October 2024 to March 2025, I was able to spend only an occasional week at my home in Russell and each time I visited a local beach, there were generally no shells of note, and things looked like they hadn't moved since the last visit. It was all rather disappointing. In mid-April 2025 I left Russell just as "Cyclone Tam" was starting to blow. I would have liked to stay through it but the Wellington Shell Club's 70th birthday celebrations required my return. I did not get back till late May. Although the Far North experienced very strong winds from all directions in the cyclone, I was not aware of anyone reporting exciting finds so I started my beach visits without any great expectations. Most beaches were bare - I suspect more likely they had been swept clean, but two beaches were a delight – Tapeka Point and Bland Bay.



Tapeka Point

Tapeka Point is at the far end of the Russell peninsula jutting out into the Bay of Islands with small, rocky beaches on each side. This time I was overjoyed to turn a corner and see one small beach full of shells, mostly small and with good looking shell sand. I immediately saw some *Philippia lutea* (Lamarck, 1822) which I have previously found is a good sign of something better. Next, a bright red *Coelotrochus carmesinus* (Webster, 1908) caught my eye. From then on I was down on my hands and knees looking but had only a short time available before it was time to leave for the day. In all I returned to this beach six times over the next three weeks. For a beginner there would have been well over a hundred different species; for me there was the continual anticipation that something exciting would turn up. Shells of note that I collected (all washed in or inhabited by hermit crabs) included: - one whole, dark *Semicassis labiata* (Perry, 1811), three *Prototyphis eos* (Hutton, 1843), one *Alcithoe fusus* (Quoy & Gaimard, 1833) with a wide protoconch, several *Bulla vernicosa* Gould, 1859, *Nassarius spiratus* (A. Adams, 1852) and *Ellatrivia merces* (Iredale, 1924). Also, *Murexsul mariae* Finlay, 1930 among which were two *Buccinulum mariae* Powell, 1940 (necessary to look carefully to tell the difference). A couple of *Herpetopoma alacerrimum* Dell, 1956 and a *H. larochei* Powell,1926; two *Macrozafra* species, a *Zelippistes benhami* (Suter, 1902), *Mammilla simiae* (Deshayes, 1838) and a *Buccinulum robustum* Powell, 1929. I have yet to sort through the smallest shell sand but have to say these finds made for a very pleasant stay. I was still finding *Philippia* on my last visit that I'm sure weren't there previously.

Bland Bay is about an hour's drive south of Russell, again facing the open sea, with the famed Poor Knights Islands, now a reserve and home to many special shells, just offshore. I wonder if occasionally

some of those shells make it to Bland Bay. The main beach is eroding back and on this visit was bare of shells. However, the rock pools were worth checking to see what the hermit crabs were wearing, both at the end of the main beach and in the small bays that open up when walking south. The best find was in a rock pool at the end of the main beach where I saw what looked like a small, spiky ball, covered in sand. I tentatively picked it up and shook off the sand to reveal the most exquisite, perfect, red colored *Monoplex exaratus* (Reeve, 1844) - a real thrill.

Other finds in the rock pools included *Muresul octogonus* (Quoy & Gaimard, 1833) and a *Rolandiella scotti* (Marshall & Burch, 2000), a large *Austrosassia parkinsonia* (Perry, 1811), a *Buccinulum pallidum powelli* Ponder, 1971 and another rare find for me - a *Casmaria perryi* Iredale, 1912. This all adds up to a very pleasing haul over two beaches and a new resolution of "never give up on your beaches."

Some of the shells found at Tapeka Point, May 2025

⇦ ***Philippia lutea*** **(Lamarck, 1822)**

⇨ ***Coelotrochus carmesinus*** **(Webster, 1908)**

⇦ ***Prototyphis eos*** **(Hutton, 1843)**

⇨ ***Alcithoe fusus*** **(Quoy & Gaimard, 1833)**

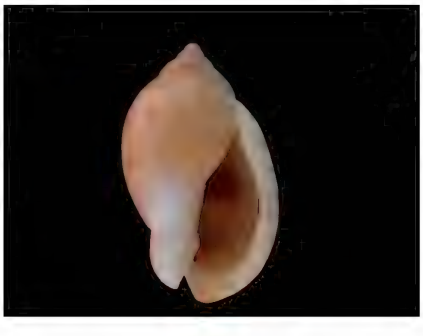
⇦ ***Murexsul mariae*** **Finlay, 1930 and *Buccinulum mariae* Powell, 1940**

⇨ ***Zelippistes benhami*** **(Suter, 1902)**

Some of the shells found at Bland Bay, May 2025

Monoplex exaratus **(Reeve, 1844)**

Austrosassia parkinsonia **(Perry, 1811)**



Casmaria perryi **Iredale, 1912**

Some Photographs of Interest

Mytilus planulatus

Lamarck,1819

It's not very often that blue mussels get their photo taken, but these ones were clean and large. They were spotted being water blasted off the base of a fishing boat supported in a cradle at Halfmoon Bay, Stewart Island. After assuring the bemused boat's owners they weren't for eating, it was "down on all fours" under the boat to collect the best ones.

Jenny Raven

Ponderia zealandica

(Hutton, 1873)

17 mm dredged at 86 m in Mercury Bay, February 2025

Claire Elliot

Maxacteon milleri

Rudman, 1971

17 mm dredged at 35 m in Mercury Bay, February 2025

Claire Elliot

Diaphana brazieri

Angas, 1877

4.5 mm dredged at 86 m in Mercury Bay, March 2025

Claire Elliot

Tritia burchardi

(Dunker, 1849)

Over 20 were found in June 2025 by Bert van Tiggele, washed in dead near the tide line at Tahunanui Beach, Nelson. A few years ago, this introduced species was only known from Auckland north. Kerry Walton, curator of invertebrates at Te Papa Tongarewa advises Te Papa has recently received other sightings of this species from the Nelson area, so it may be worth looking out for it in harbours and estuaries in both the North and South Islands.

Physella acuta

(Draparnaud 1805)

This introduced snail was recently found by Bert van Tiggele in small streams at Saxton Field, a stream near Wakapuaka and from Tahunanui Beach in Nelson. The conclusion is that it is likely to inhabit most of the freshwater streams around Nelson. This gastropod has become a threat to our native freshwater snails by reproducing in very high numbers.

Porcupine fish

In March 2025 the Wellington Shell Club held a field trip from Seatoun to Point Dorset, Wellington. One of the more interesting finds was a porcupine fish which had washed in among the rocks. These fish puff up when threatened and as it was still alive, club member Indiana Willis decided to rescue it. Because of its many spines, it took some gentle nudging to get it back out to sea.

Jasus edwardsii

Not a shell, but club member Hao Cheng brought this mounted red rock lobster *Jasus edwardsii* to the Wellington Shell Club January 2025 meeting. It weighed about 4 kg when fresh and measured 10 cm across the tail and approximately 18 cm long. He caught this one west of Mana Island at a depth of about 9 m in October 2024. A good catch, Hao.

Answer from inside front cover: It was Jenny Raven's car key lost at Tapeka Point. Despite much searching at the time, it was not found until over a year later, at extreme low tide.

Photographing Shells (and other things) in Nature

Jenny Raven

Are you using a camera with built-in "focus stacking" software - you should be if you like photographing small things. These cameras contain software that photograph a single subject at different focal lengths i.e.10 or more shots in a few seconds and then combine them, equally quickly, to present you with one photo in perfect focus (that is providing the camera and subject remain relatively still while photographing). Many cameras contain "focus bracketing" software; these also take multiple shots at different focal lengths but present you with the individual shots for you to download into a computer software program that will also combine them into a single photo. However, this takes time and effort on your behalf, so if given the chance buy yourself a camera that contains "focus stacking" software – small shells and insects in perfect focus in seconds. Give it a go, you won't regret it.

Recent Scaphopoda of New Zealand

Arie Frans de Jong

Introduction

Few people study Scaphopoda, or tusk shells as they are commonly known. The first monograph on this group appeared in 1897-1898 by H.A. Pilsbry and B. Sharp and is still an invaluable work for "scaphopodologists." Since then, taxonomy has changed several times, and complete overviews of the known Scaphopoda have subsequently been assembled (Steiner, 1992; Steiner & Kabat, 2001, 2004). Valuable regional overviews have been published for the Indo-Pacific region in general (Scarabino, 1995), Australia (Lamprell & Healy, 1998), and New Caledonia (Scarabino, 2008).

Focusing on New Zealand, tusk shells are referred to in Suter (1913), Dell (1953, 1957, 1964 & 1995), and Powell (1955, 1979). The important work done by authors like Marwick, Hutton and Beu & Maxwell is also, of course, invaluable for a good overview of fossil New Zealand scaphopods but that is beyond the scope of this paper which focuses on extant scaphopod species. Cresswell (1976) published a taxonomic overview of New Zealand tusk shells in *Cookia.* Two important inventories on the New Zealand biodiversity were made by Spencer et al. (2009) and Marshall et al. (2023), both providing an overview of the scaphopod fauna of New Zealand. This paper consolidates, and provides some additional, information about living New Zealand scaphopods, and their distributional range.

Scaphopods are strictly marine organisms and are found from shallow waters to the abyssal plains. There are 577 extant scaphopod species known to science worldwide (Rosenberg, 2014). However, scaphopods are understudied, so the actual number of species is likely to be considerably higher. An inventory of the biodiversity of New Zealand by Spencer et al. (2009) recorded 11 extant scaphopod species from New Zealand, with an additional 36 occurring species still unidentified or undescribed. 44 extant scaphopod species were recorded in the updated marine molluscan faunal checklist of New Zealand by Walton et al. (2023), an actual decrease compared to the 2009 checklist as some taxa were reinterpreted.

About Scaphopoda

The class of Scaphopoda is, as stated above, a relatively poorly known group. Their anatomy differs significantly from better known groups such as gastropods, bivalves or cephalopods. Among other important features, scaphopods lack a well-developed heart, and their heads are equipped with captacula shields. Captacula are unique tentacle-like appendages, and depending on the species, tens to hundreds of these structures are present, used for capturing prey. Scaphopods are highly selective infaunal micro-carnivores preying mainly on foraminifera. They are bottom dwellers and live buried in sediment with their apices above the surface but are also frequently observed crawling around. They dig feeding cavities in the sediment by a burrowing movement of the foot, and from these cavities captacula protrude in search of interstitial organisms.

The shell consists of a tube, open at both ends. The narrow opening, the apex or posterior end, is used for respiration and excretion of waste products. The foot and head with captacula shields occupy the larger aperture or anterior end. The outside of the shell is often white or translucent and can be smooth and shiny or ornamented with ribs, riblets or rings. In most cases the shell is curved like an elephant's tusk, hence their common name.

Occurrence

Scaphopods are mostly uncommon finds on New Zealand's shores, and they are not very common in the rest of the world either. Most species live in sublittoral environments, often in (very) deep water. While some species, like *Antalis nana* and *Cadulus teliger,* are occasionally washed up on New Zealand's beaches, all other species are found by fishing or dredging. They can be locally abundant. Scaphopod species prefer soft substrate, such as muddy and sandy bottoms, for burrowing. As foraminifera are their main source of food, finding forams in beach drift could be an indicator of the presence of tusk shells. The author found them often abundantly washed up along beaches near river mouths in Europe, the United States and Indonesia where many foraminifera live in river estuaries and coastal waters.

Systematic overview

The supraspecific classification of New Zealand's scaphopods has been significantly revised since earliest literature on the subject (i.e. Suter, Dell, Powell, and Cresswell). In this paper Steiner & Kabat (2001, 2004) are followed, unless otherwise stated. The World Register of Marine Species (WoRMS) has been used for up-to-date nomenclature at the species level. For specific descriptions Suter (1907), Dell (1953, 1957), Powell (1979) and Scarabino (1995, 2008) are followed. Only extant species are described in this overview; species recognized but not yet named are excluded. Most species mentioned are endemic to New Zealand's waters; only those living in waters below 1,000 meters may have a wider distribution.

With each species a short morphological description is given as well as an indication of their distribution and depth range. Distribution maps for the better-known species are provided, courtesy of Kerry Walton, curator of invertebrates at the Museum of New Zealand Te Papa Tongarewa. These maps are based on the museum database and contain data of Recent species and quaternary fossil samples (i.e., some of the outliers may represent extinct populations). Two species that were previously mentioned from New Zealand were misidentified; *Dentalium tiwhana* Dell, 1953 proved to be a serpulid worm, *Serpula crenata* (Ehlers, 1908) (Polychaeta, Serpulidae) vide Dell (1995:21), and *Dentalium ecostatum* T.W. Kirk, 1880 turned out to be a planktonic gastropod, *Creseis acicula* (Rang, 1828) (Gastropoda, Creseidae) vide Marshall (1996:32).

Class SCAPHOPODA Bronn, 1862
Order Dentaliida Starobogatov, 1974
Family DENTALIIDAE Children, 1834

***Antalis* H. Adams & A. Adams, 1854 (type species *Dentalium entalis* Linnaeus, 1758)**

***Antalis diarrhox* (R.B. Watson, 1879)**

Suter (1913: 820, pl 32, fig 5); Dell (1957: 568, Pl. 39, fig 2); Cresswell (1976: 73); Powell (1979: 353); Steiner & Kabat (2001, 440); Steiner & Kabat (2004: 620); Spencer et al. (2009: 183-184 & 200); Marshall et al. (2023: 224).

Shell white (chalky), but porcellaneous beneath the surface, rather straight, with a considerable bend near the apex; shell covered with faint longitudinal lines. The apex has a very narrow fissure on the ventral (convex) side. Length 17.5 mm. Aperture 2.25 mm. Distribution: from NE North Island to Chatham Rise. Occurs in depths from 400-1,300 m.

***Antalis glaucarena* (Dell, 1953)**

Dell (1953: 48, figs 16-18-21); Dell (1957: 574-575); Cresswell (1976:72, fig 4); Powell (1979: 353, fig.82:2); Steiner & Kabat (2001: 440); Steiner & Kabat (2004: 595); Spencer et al. (2009: 183-184 & 200); Raven & Bracegirdle (2020: 81); Marshall et al. (2023: 224).

Shell small, white, fragile, slightly curved and rapidly tapering. Apex in fresh specimens with a shallow notch at the convex ventral side. Apex first smooth with growth lines only, then 16 sharp ribs which continue through to the anterior end. Length 12.5-26.7 mm. Aperture 1.7-2.5 mm. Distribution: South Island, Chatham Rise, SE of Pitt Island, Chathams. Occurs in depths of 360- 600 m.

***Antalis nana* (F.W. Hutton, 1873)**

Suter (1913: 818, pl 49, fig 17); Dell (1957: 570-573, pl 39, figs 1-4-5); Cresswell (1976: 72); Powell (1979: 353, fig 82:3); Steiner & Kabat (2001: 440); Steiner & Kabat (2004: 584, 600); Spencer et al. (2009: 183-184 & 200); Raven & Bracegirdle (2020: 81); Marshall et al. (2023: 224).

Map 1: Distribution of *Antalis nana*

***Antalis nana* NMR 191853 45.7 mm**
Photo: Joop Trausel – malacopics.nl

Shells white, slightly curved, ribbed over the entire length of the shell. Number of ribs 9-13. Apex simple (no notch or slit). Length average 20.7-37.7 mm. Aperture 2-3 mm. Distribution: see map 1. This species seems to be restricted to the waters around the North Island, records from the South Island are likely misidentified (Kerry Walton – *pers comms* 1/4/2024). Occurring from the sublittoral zone to depths up to 300 m. *Dentalium huttoni* T.W. Kirk, 1880, is a junior synonym of *Antalis nana*; *Dentalium huttoni* Bather 1905 is a junior homonym of *Dentalium huttoni* T.W. Kirk 1880.

***Antalis suteri* (W.K. Emerson, 1954)**
Suter (1907: 214-215, pl. 18, fig 11, as *D. arenarium);* Suter (1913: 821, pl 49, fig 16, as *D. arenarium*); Emerson (1954:185); Dell (1957: 573-574, text-fig 2: 20-22, pl.39, figs 8-11); Cresswell (1976: 72-73, fig 5); Powell (1979: 354, figs 82:4-5); Steiner & Kabat (2001: 440); Steiner & Kabat (2004:565, 652); Spencer et al. (2009: 183-184 & 200); Raven & Bracegirdle (2020: 81).
Shell similar to *Antalis nana* in size, with variable

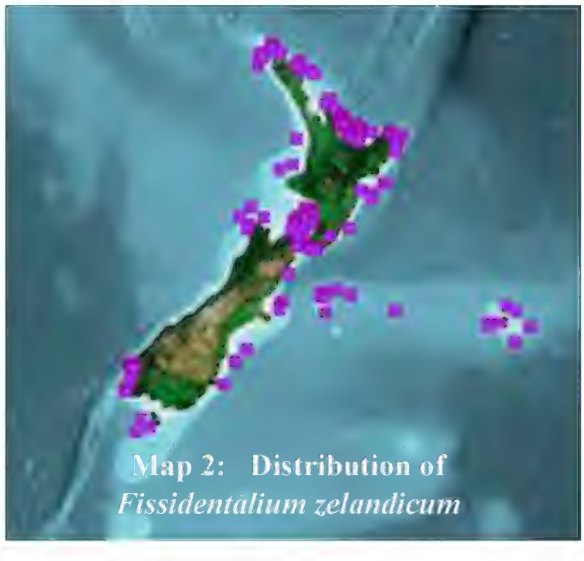
***Antalis suteri* 422 v.d. Beek 31.6 mm**
Photo: Joop Trausel – malacopics.nl

number of ribs. Apex in most cases truncated with a supplementary pipe. Length average 21.1- 45.5 mm. Aperture 2.1-3.9 mm. *Antalis suteri* was described from Port Pegasus on Stewart Island and is recorded from Fiordland, Mernoo Bank, Chatham Islands and Chatham Rise. Recorded depth range between 30-375 m. The species was described by Suter (1907) as *Dentalium (Episiphon) arenarium*, a name that was already occupied by Römer, 1855 for a fossil scaphopod taxon from Europe. Emerson re-named it after the original author. The taxonomic status of this species is under inquiry for its similarity to other scaphopods in the region.

Fissidentalium P. Fischer, 1885 (type species Dentalium ergasticum P. Fischer, 1883)
***Fissidentalium zelandicum* (G.B. Sowerby II, 1860)**
Suter (1913: 819-820, pl 49, fig 14); Dell (1957: 565-566, text-fig 1: 1-2 and 2: 8-9, pl 39, figs 12-13); Cresswell (1976: 72); Powell (1979: 354, figs 82:9-10); Steiner & Kabat (2001: 444); Steiner & Kabat (2004: 664-665); Spencer et al. (2009: 183-184 & 200); Raven & Bracegirdle (2020: 81); Marshall et al. (2023: 224).

The largest named New Zealand scaphopod; shell large and solid, slightly arcuate, slowly tapering, with numerous longitudinal riblets. Length ranges from 57.0 to 88.0 mm. Aperture 8.0-11.5 mm. *Fissidentalium zelandicum* is distributed all around New Zealand, including Stewart Island, the Chatham Rise and Chatham Islands. Recorded depth range: 45-550 m. *Dentalium pacificum* F.W. Hutton, 1873 is a junior synonym of *Fissidentalium zelandicum* and *Dentalium opacum,* G.B. Sowerby l, 1828 is a nomen dubium, possibly also referring to this species.

***Fissidentalium zelandicum* 191850 67 mm**
Photo: Joop Trausel – malacopics.nl


Map 2: Distribution of *Fissidentalium zelandicum*

Order Gadilida Starobogatov, 1974
Suborder Entalimorpha Steiner 1992
Family ENTALINIDAE Chistikov, 1979
Subfamily HETEROSCHISMOIDINAE Chistikov, 1982

***Pertusiconcha* Chistikov, 1982 (type species**

***Dentalium callithrix* Dall, 1889)**
***Pertusiconcha tridentata* Chistikov, 1982**
Scarabino (1995: 312-314, figs 114 and 115:h); Steiner & Kabat (2001: 448); Steiner & Kabat (2004: 658); Scarabino (2008: 247); Spencer et al. (2009: 183 -184 & 200); Marshall et al. (2023: 224).
Shell white, slender, evenly curved. Sculpture of 9 moderately raised, rounded longitudinal ribs, strong near the apex, becoming low and obsolete towards the aperture. Length 34.0-37.0 mm. Aperture 3.4-3.5 mm. Reported from New Zealand, Tasman Sea and New Caledonia, with probably a much larger distribution in the Indo-Pacific. In New Zealand found at 2,470 m.

Suborder Gadilimorpha G Steiner, 1992
Family WEMERSONIELLIDAE Scarabino, 1986

Chistikovia Scarabino, 1995 (type species *C. kermadecae Scarabino, 1995)*
***Chistikovia kermadecae* Scarabino, 1995**
Scarabino (1995: 327-328, figs 128 and 128: d-e); Steiner & Kabat (2001: 441); Steiner & Kabat (2004: 606); Spencer et al. (2009: 183-184 & 200); Marshall et al. (2023:224).
Shell polished white, straight, fragile, no sculpture. Dorsal side straight, ventral side very slightly curved. Maximum diameter at the anterior third of the shell. Apex wide, with subtriangular lobe. Aperture thin, oblique. Length 11.5 mm. Maximum diameter 2.1 mm. Known only from the Kermadec Trench; lives in abyssal waters 4,150-4,570 m.

***Wemersoniella* Scarabino, 1986 (type species *W. turnerae* Scarabino, 1986)**
***Wemersoniella knudseni* Scarabino, 1995**
Scarabino (1995: 326-327, figs 127 and 129: b-c); Steiner & Kabat (2001: 451); Steiner & Kabat (2004: 607); Spencer et al. (2009: 183-184 & 200); Marshall et al. (2023: 224)
Shell porcellaneous white, straight, fragile, slightly dorsoventrally depressed. Apex with two lateral lobes separated by two wide, rounded basal notches, the dorsal one deeper. Maximum diameter at the aperture. Length 11.0-12.0 mm. Aperture 1.6-2.2 mm. Known from the Kermadec Trench and Tasman Sea, off South Island, alive in 4,105-4,630 m.

Family GADILIDAE Stoliczka, 1868
Subfamily SIPHONODENTALIINAE Simroth, 1894

***Siphonodentalium* M. Sars 1859 [type species *Dentalium vitreum* M. Sars, 1851 = *Siphonodentalium lobatum* (G.B. Sowerby II, 1860)]**
***Siphonodentalium colubridens* (R.B. Watson, 1879)**
Suter (1913: 822-823, pl 32, fig 6); Dell (1957: 564); Cresswell (1976: 71, fig 1); Powell (1979: 354)' Steiner & Kabat (2001: 450); Steiner & Kabat (2004: 577); Scarabino (2008: 250); Spencer et al. (2009: 183 -184 & 200); Marshall et al. (2023: 224).
Shell almost smooth and considerably swollen near the aperture. Length 15.0 mm. Max. diameter 2.5 mm. Aperture 1.75 mm. Reported off NE point of New Zealand (holotype, Challenger Expedition), also recorded from New Caledonia and reaching to Indonesia, Philippines and Japan. A deep-water species found in 1,280-2,800 m.

***Siphonodentalium delicatulum* (Suter, 1913)**
Suter (1913: 823, pl 32, fig 7); Dell (1957: 561-562, text-fig 2: 11-12); Cresswell (1976: 71, fig 3); Powell (1979: 354, figs 7-8); Scarabino (1995: 333); Steiner & Kabat (2001: 440); Steiner & Kabat (2004: 582); Spencer et al. (2009: 183-184 & 200); Raven & Bracegirdle (2020: 81); Marshall et al. (2023: 224).
Shell gently curved and evenly tapering, except for a slight constriction at the aperture. Apex indented by 6 slits. Length 11.5-13.5 mm. Aperture 1.8-2.1 mm. See map 3, occurs in waters all around New Zealand (North and South Island, Chatham Rise and Chatham Islands), in depths of 35-620 m. Steiner & Kabat (2001, 2004) place this species in the genus *Cadulus* (e.g. *Cadulus delicatulus* Suter, 1913); Scarabino (1995) places it in *Siphonodentalium*, without underpinning arguments. However, this opinion is followed by later authors and now accepted by WoRMS. Further taxonomic study is needed which goes beyond the scope of this article.

Map 3 Distribution of *Siphonodentalium delicatulum*

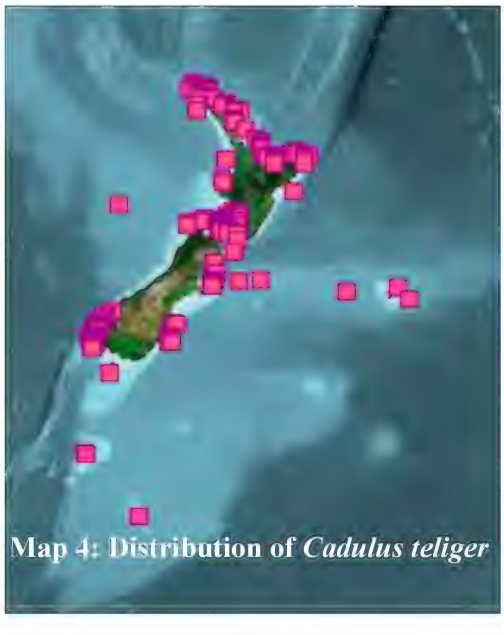
Siphonodentalium delicatulum
Photo: J.C. Stahl -Te Papa Tongarewa

Family GADILIDAE Stoliczka, 1868
Subfamily GADILINAE Stoliczka, 1868

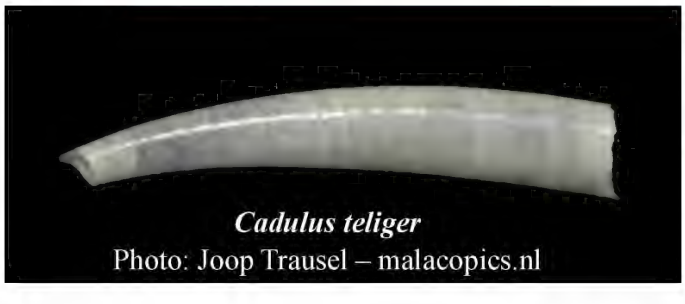
***Cadulus* R.A. Philippi, 1844 (type species *Dentalium ovulum* R.A. Philippi, 1844)**
***Cadulus teliger* H.J. Finlay, 1926**

Dell (1957: 562-563, text-fig 2: 23); Cresswell (1976: 71 fig 2); Powell (1979: 354, fig 6); Steiner & Kabat (2001: 441); Steiner & Kabat (2004: 654); Spencer et al. (2009: 183-184 & 200); Raven & Bracegirdle (2020: 81); Marshall et al. (2023: 224).

Shell smooth, slender, slightly curved, mainly of uniform thickness, only slightly constricted at the aperture. The apex has one raised triangular process on the convex side of the apical orifice. Length 4.7-5.1 mm. Aperture 0.7 mm. See map 4, widespread in New Zealand waters (North, South and Stewart Islands, Chatham Rise, Chatham Islands& Auckland Islands). Depth 15-365 m.



Map 4: Distribution of *Cadulus teliger*



Cadulus teliger
Photo: Joop Trausel – malacopics.nl

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References:

Cresswell, P.L. 1976. The supraspecific classification of the New Zealand recent Scaphopoda. *Cookia* 1 (2): 71-75, figs 1-5.

Dell, R.K. 1953. A Molluscan Fauna from the Chatham Rise, New Zealand. *Records of the Dominion Museum* 2: 37-50.

Dell, R.K. 1957. A revision of the Recent Scaphopod Mollusca of New Zealand. *Transactions of the Royal Society of New Zealand* 84 (3): 561-576, pl. 39.

Dell, R.K. 1964. Antarctic and Subantarctic Mollusca: Amphineura, Scaphopoda and Bivalvia. *Discovery Reports* 33: 93-250.

Dell, R.K. 1995. New species and records of deep-water mollusca from off New Zealand. *Tuhinga: Records of the Museum of New Zealand Te Papa Tongarewa* 2: 1-26, figs 38.

Finlay, H.J. 1926. A Further Commentary on New Zealand Molluscan Systematics. *Transactions of the New Zealand Institute* 57: 320-485.

Lamprell, K.L. & Healy, J.M. 1998. A revision of the Scaphopoda of Australian Waters (Mollusca*). Records of Australian Museum* Supplement 64: 1-189.

Marshall, B.A. 1996. Molluscan name-bearing types in the Museum of New Zealand Te Papa Tongarewa. *Tuhinga: Records of the Museum of New Zealand Te Papa Tongarewa* 9: 1-85.

Marshall, B.A., Bolstad, K.S.R. & Enderby, A. 2023. Checklist of extant Mollusca known from the New Zealand EEZ. Pp. 221-237 in Kelly, M., Terezow, M., Sim-Smith, C. & Nelson, W. (Eds) The marine biota of Aotearoa New Zealand. Updating our marine biodiversity. Chapter 14. *NIWA Biodiversity Memoir* 136.

Pilsbry, H.A & Sharp, B. 1897-1898. Scaphopoda. *Manual of Conchology. S*er. 1 (17): i-xxxi & 32-144 (1897) 145-280 (1898), pls. 1-39.

Powell, A.W.B. 1955. Mollusca of the Southern Islands of New Zealand. *DSIR Cape Expedition Series Bulletin* 15: 1-138.

Powell, A.W.B. 1979. New Zealand Mollusca. Marine, Land and Freshwater Shells. *Collins.* 500pp. figs 120.

Raven, J. & Bracegirdle, S. 2020. New Zealand Seashells. https://sites.google.com/site/wellingtonshellclub 1-92, 1000+illus.
Rosenberg, G. 2014. A new critical estimate of named species -level diversity of the recent Mollusca. *Amer. Malac. Bull*. 32 (2): 308–322.
Scarabino, V. 1995. Scaphopoda of the tropical Pacific and Indian Oceans, with description of 3 new genera and 42 new species. In P.Bouchet (ed) *Résultats des Campagnes Musorstom*. 14 Mém. Mus. Hist. nat. 167: 189-379.
Scarabino, V. 2008. New species and records of scaphopods from New Caledonia. In: Héros, V., Cowie, R.H. & Bouchet, O. (eds). *Tropical Deep-Sea Benthos*. 25 Mém. Mus. Hist. nat. 196: 215-268.
Spencer, H.G., Marshall, B. A. & Maxwell, P.A. et al. 2009. Phylum Mollusca. NZ Inventory of Biodiversity. Vol.1. Kingdom Animalia. *Canterbury University Pres*. 566pp. 161-254.
Steiner, G. 1992. Phylogeny and classification of Scaphopoda. *Journal of Molluscan Studies* 58: 385-400
Steiner, G. & Kabat, A.R. 2001. Catalogue of supraspecific taxa of Scaphopoda (Mollusca). *Zoosystema* 23 (3): 433-460.
Steiner, G. & Kabat, A.R. 2004. Catalogue of species-group names of Recent and fossil Scaphopoda (Mollusca). *Zoosystema* 26 (4): 549-726.
Suter, H. 1907. Description of six new species of shells and of *Leptomya lintea*, Hutton, 1873 from New Zealand. *Proceedings of the Malacological Society of London* VII: 211-216.
Suter, H. 1913. Manual of New Zealand Mollusca: 1-1120. Atlas of Plates (1915) pls. 1-67. *John Mackay, Government Printer*.
Walton, K., Marshall, B. A. & Spencer, H.G. 2023. The Marine Biota of Aotearoa New Zealand, Kingdom Animalia, phylum Mollusca. *NIWA Biodiversity Memoir 136, Chapter 14*. https://niwa.co.nz/biodiversity-memoirs/ 494pp.
World Register of Marine Species. https:// www.marinespecies.org/

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Two classic New Zealand endemic shells *Alcithoe arabica* and *Maurea tigris*, painted in oil 300 x 200 mm by Claire Elliot, August 2022.

From Lockdown to Platinum Anniversary - the last five years

Jill Burnet

Five years ago, we were shut up in lockdown by Covid-19. Our club's 65th anniversary was a total non-event, there being too many restrictions still in place to hold any meeting in May 2020. Our normal meetings resumed in July 2020 at Kris and Roger Woods' home, where Jenny Raven and Selwyn Bracegirdle launched their much-awaited publication, "New Zealand Seashells" We really appreciated being able to talk about shells again. We went to Vivienne and Clive Robertson's in August for a look at local shells, and then in September made the trip up to Levin to Ian Townsend for a meeting with two topics: volutes and fossils. This meeting was particularly well attended, and we were pleased to see Jim Harding from New Plymouth, Rod Sudlow from Wanganui, Fred Keil from Masterton and Heather Smith from Auckland.

The October meeting happened to fall on the day of the Bledisloe Cup game, so we made an early start, pandering to the rugby fans who wanted to settle down in front of Pat Lakeman's TV in time for the game. We got in the mood with a suitable theme – bring your ugliest, prickliest or most poisonous Australian shell. We finished the year with our AGM at the Hardwick Smith Lounge in Belmont. The same committee was re-elected for 2021, but Pat Lakeman and Kerry Walton gave notice that it would be their last year as *Cookia* editors.

The new year started with meetings at Jenny Raven and Pat Lakeman's homes and then, in March, we had a field trip to Lyall Bay. We were lucky with the weather, and we explored most of the bay from the airport to Arthur's Nose. We sat down to a late lunch in the outdoor area of a café in Rongotai and tipped our finds over the table – with Tony Tomlin being the lucky person. He had spotted a little paper nautilus.

After this very successful outing, we continued our usual pattern of meetings at members' homes. The May meeting, hosted by Selwyn and Carol Bracegirdle included a "Big Shell Sale" – they were downsizing in anticipation of a move to the Bay of Plenty. Then, just when we thought life was back to normal, Wellington went to "covid alert level 2" thanks to an Australian tourist, and our June meeting had to be cancelled. We were able to hold our July meeting at Pat Lakeman's home. Kathy and Les Carson came up from Christchurch to tell us about their trip around Northland. In August covid struck again with an outbreak of the delta variant and another meeting was cancelled. We did manage to get together in September and had a two-day fossil event which started with a meeting at Tony Tomlin's, where we were lucky to have Dr Alan Beu as well as Eric Scott, who came from Whangarei. This was followed by an outing to some southern Wairarapa fossil sites. Several of us started early and visited David Cowe in Greytown, where his extensive fossil collection was spread out. Back at the rendezvous in Featherston, we followed Tony's car along windy, hilly roads from fossil site to fossil site. We all found something of interest, and it was really hard to prise the keenest hunters away from the cliff faces. Altogether, a very successful and happy outing, well organised by Tony. In October, we had an outing of a different kind – Waikanae Beach, followed by a get-together at a nearby café. The year ended with our AGM – this time at the Belmont Memorial Hall, where Pete Cresswell stepped into the position of editor.

Early in 2022, we combined our meeting with the packing up of Ian Townsend's collection. He was moving from his lovely home on The Avenue to "Summerset by the Ranges". He took a couple of display cases for his most favoured specimens, otherwise most of his collection was given to the club to be used for raffle prizes or distributed to members. The following month there was an outing to Plimmerton where we poked about among the rock pools and tide lines for a couple of hours before driving to Tony's where we enjoyed a barbeque meal – entertained by ducks, chooks and cats. Over the following months, members hosted meetings at their homes. The new public holiday of Matariki was celebrated with an outing to Onehunga Bay in Whitireia Park. This was a good afternoon, and we headed back to

Wellington in time to enjoy the public fireworks display. In July, Margaret Elliot, a keen underwater photographer, presented a slide show of the amazing flora and fauna in the sea at Taputeranga Marine Reserve. The next month we had planned to meet at Vivienne Robertson's in Wainuiomata, but a large slip over the hill road caused a cancellation. Shortly afterwards, a group from Wellington, Christchurch and Nelson spent five days in Nelson and Golden Bay. The year ended with an outing to Eastbourne, an AGM and the re-election of the same committee.

In March 2023, we branched out with something different – an 'open day' at the "Collective Community Hub" in Johnsonville. There were displays of shells, shells for sale, and give-away shells for children. All this proved very successful with a good throughput of visitors. It gained us new members plus the return of one ex-member, Lyn Clark. A trip to Waikanae in April concentrated on the river mouth. Thereafter various members hosted home meetings. An extra bit of club publicity was a display in a shop window at the Johnsonville Mall. This was in conjunction with the mall's 'ocean theme' for the school holidays. Kerry Walton delighted us with his return to Wellington to take up a new position at Te Papa, and in September he gave a talk, firstly explaining the purposes of the national mollusc collection, followed by a review of the New Zealand Calliostomatidae. That month we also offered members a chance to win a New Zealand shell in a free draw – open to all club members - twenty shells to be won. In October, Lyn Clark told us about the club trip to Mahia and wrote it up in *Cookia.* The same committee, *sans* Pat Lakeman, was re-elected at the AGM.

For 2024, our monthly meetings at members' homes continued. The big plans for April – a trip through Terawhiti Station to Oteranga Bay was abandoned owing to bad weather (still on the 'to do' list awaiting suitable conditions on a weekend). Bad luck continued with the hostess for the next meeting getting Covid. Fortunately, that coincided with my cat-sitting at Pat Lakeman's and quick action, involving many texts and phone calls resulted in holding the meeting at Pat's. June saw a second 'open day' at the Johnsonville Hub, at which we welcomed David Cowe and his daughters from Greytown. The next month we enjoyed another talk by Kerry Walton at Te Papa. He enthralled us with an account of his trip on the NIWA research vessel, RV *Tangaroa* to the Bounty Trough. A second free draw of New Zealand shells for our members established it as a very popular item. Judy Hardie and David Cowe hosted respective meetings before the year was rounded off with a field trip to Moa Point followed by the AGM at Belmont.

And here we are in 2025, our platinum anniversary. Kerry suggested we be part of Te Papa's

Club AGM in the Belmont Memorial Hall, November 2024

"City Nature Challenge", followed by an evening social. Much planning to be done. February saw a barbeque at Chris Downs'. In March there was a field trip walking from Seatoun beach to Fort Dorset, with many shells being picked up for use at the Te Papa occasion. At our May meeting, Pat reminded us it was our actual 70th anniversary – almost to the day.

References:

Burnet, J. & Woods, R. 2020. Going Viral, and Club Meetings Resume after Hiatus. *Cookia* 32: 30-33

Burnet, J. 2024. Club 'Open Day', Johnsonville. *Cookia* 36: 16

Burnet, J. 2024. First Matariki Holiday (2022). *Cookia* 36: 29

Carson, K. & Lakeman, P. 2021. The Carson's North Island Trip, March - April 2021. *Cookia* 33: 2-3

Clark, L. 2023. Shell Club Field Trip to Mahia Peninsula. *Cookia* 36: 20-21

Elliot, M. 2022. Exploring the Taputeranga Marine Reserve with my Camera. *Cookia* 34: 28-29

Lakeman, P. 2023. Club Activities. *Cookia* 35: 16

Raven, J. 2023. Club Trip to Golden Bay. *Cookia* 35: 15

BIG SHELL SALE
+ WELLINGTON SHELL CLUB MEETING
Shell Sales from 1pm
Something for everbody - don't miss out!
Club Meeting from 2pm
Featuring the shells of Papamoa Beach!
Sunday 23 May 2021
74 Winston St, Crofton Downs, Wellington
at the Bracegirdle's place - park in the street - do not come down the shared drive - house at the very end.
Papamoa Beach samples

Advertising flyer for Carol and Selwyn Bracegirdle's "Big Shell Sale", May 2021

Exploring Chris Down's private museum, club meeting, February 2025

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Cookia has been the annual journal of the Wellington Shell Club since 1976. Prior to this the Wellington Shell Club published a 'Circular' (1956-1965) and then a 'Bulletin' (1967-1975) as well as occasional 'Study Notes' on families of molluscs. Copies of *Cookia* more than 2 years old are available as a downloadable PDF from the website. Otherwise, please contact the secretary to request hard-copy back issues or copies of articles (charges may apply).

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The editors strive to attain a high quality of publication and careful fact-checking. The scope of articles is intended to reflect the differing specialties, levels of interest and experience within the club. We hope all members will be able to contribute should they wish. We welcome both scientific and non-scientific articles, opinion pieces, drawings, photos, and articles not directly related to shells or shell collecting as long as they have some relevance.

Contributions should be in plain English, the author's original work, preferably typed, and submitted to the editor before 31 May each year. Articles are typically published in two to three columns which means articles containing rigid formatting or oversize illustrations are unlikely to be accommodated as may articles longer than four pages. Grammar, spelling and punctuation should be carefully checked before submission and recent issues of *Cookia* consulted for examples of the expected standard.

Formatting and References
It would greatly assist the editors if contributors could submit articles using the tools and format currently being used for *Cookia.* This is: typed in Microsoft Word with Times New Roman 11.5 font and 1.19 line spacing, left justified and without end-of- line hyphenation. Free tools are available on-line to convert Google Docs and Apple Pages documents to Microsoft Word,. Hand-written articles are also accepted, providing they are neatly printed, rather than longhand, double spaced and on A4 paper.

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Photos or illustrations to accompany an article or individual find are welcome. They should be supplied separately as original jpg or similar photo files in highest resolution possible, and not embedded in accompanying text or emails, and not reduced in size or resolution for sending but submitted over more than one email if necessary. Where possible, specimens should be photographed at a 90° angle to the height/length axis, with gastropods displayed in an apertural view. Photos of an interesting or unusual find should be accompanied by text giving the approximate location, date and details of the find.

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Happy, fun times over 70 years with the Wellington Shell Club

Penion cuvierianus **and Cuvier Island. Painted in acrylic by Claire Elliot, November 2018.**